eCAMit
Network / IP Camera

User's Manual

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Revision History

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1. Product Overview

1.1 Introduction

eCAMit is a color camera with Built-in IP address, Ethernet Software Stacks and Protocols. Plug eCAMit directly to a RJ45 Ethernet port and watch the camera site from anywhere around the world. Connecting directly to Ethernet networks, eCAMit is a standalone digital network camera requiring no server at the camera site. With the motion detection and trigger in/out functions, eCAMit will provide you the security with the easiest installation.

1.2 Features

Low cost, DIY security camera – Simple installation and multiple mounting methods.
No computer needed at monitored site
Remote monitoring of UNLIMITED sites simultaneously
Up to 11 users concurrently browsing the same camera
Built-in Motion Detection for security
Standard JPEG Image Format
Trigger In connector for connecting external sensor for extra security
Trigger Out connector to alert other external device such as alarms
Record Motion JPEG images onto hard drive for future viewing
Password protection - Public / Supervisor password system for you to decide who is authorized to browse the camera.
E-mail alert function - Send up to 20 JPEG image files to pre-set e-mail address when intruder is detected.

1.3 Package Contents

- 1 x eCAMit III Camera
- 1 x CD with software (eCAMit_Setup & eCAMit_AP) and user's manual
- 1 x RJ45 Ethernet cable
- 1 x Power adapter with Trigger In / Out connectors
- 1 x DB9 (RS232) connector cable for setup
- 1 x Desktop / Ceiling mount

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2. Physical Description

The following information contains the physical description of eCAMit series camera. This includes the functions and the locations of each connector and indicator. The information provides useful reference when installing the product. Please familiarize yourself with eCAMit cameras.

2.1 The Front Panel

Lens

eCAMit box includes a standard 118° wide angle lens fix to the camera. Other types of lens are also available upon request. Please note that different price may apply to different lenses.

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2.2 The Back Panel

RS232 Serial Connector

This serial connector provides links between the computer and the camera via RS232. This connector is used to configure the camera for the first time before the camera is installed and require no LAN connection.

Network Connector

eCAMit is designed for 10Mbps Ethernet networks. eCAMit connects to the network via category 5 cable.

Power Supply Connector

eCAMit adopts unique RJ22 cable for power supply. The special featured RJ22 cable includes Input / Output (I/O) function. Simply connect the Input / Output cable to desire device and no hardware jumper fixing on camera is required.

Serial Number / Firmware version

The label sticker includes the serial number and the Firmware version of the camera.

Note. If you have updated the camera firmware version, the firmware version information may no longer be valid.

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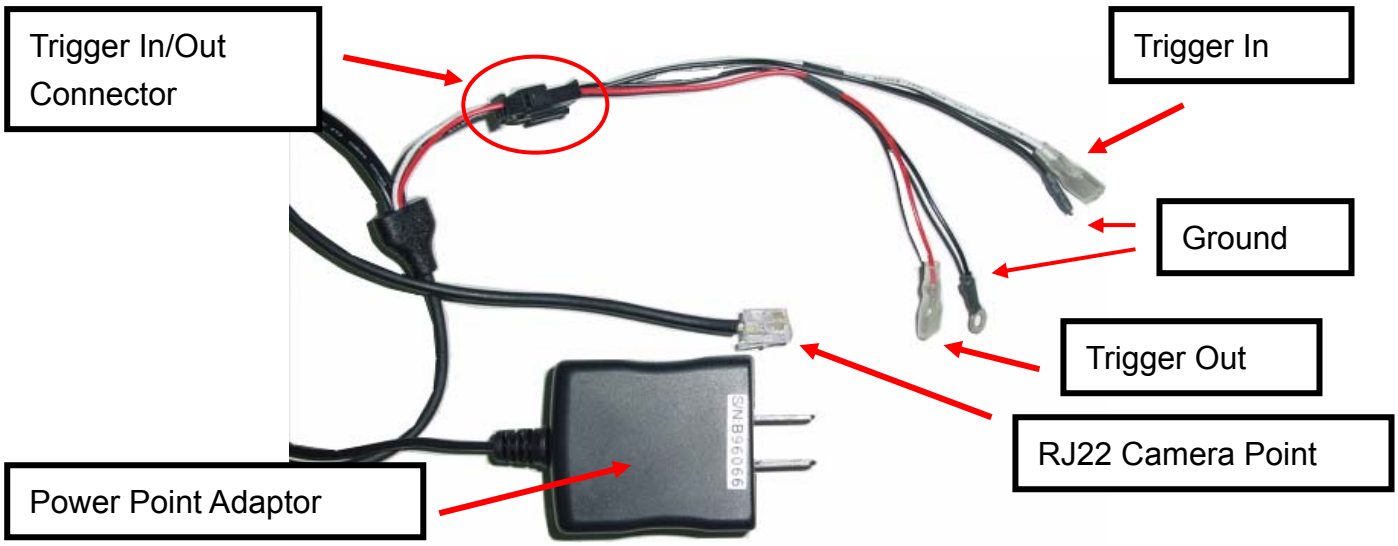
2.3 Power Supply Adaptor



Power Point Adaptor

Plug the power point to your local power point. The specifications for the power adaptor are as follows:

Input: 100 – 240Vac ~ 0.3A 50/60Hz

Output: 5.0Vdc / 2.0A

RJ 22 Camera Point

Plug this end to the camera's RJ22 slot.

Trigger In / Out Connector

The Trigger In/Out connector cable is connected to the RJ22 AC power adaptor.

Trigger Out

The Red cable is for Trigger Out and it needs to be connected to TTL level (0 – 5 V) external devices.

Trigger In

The White cable is for Trigger In and it also required to be connected to TTL level (0 – 5 V) external devices.

Ground

The Ground cable is the black and can be found both on *Trigger In* and *Trigger Out*.

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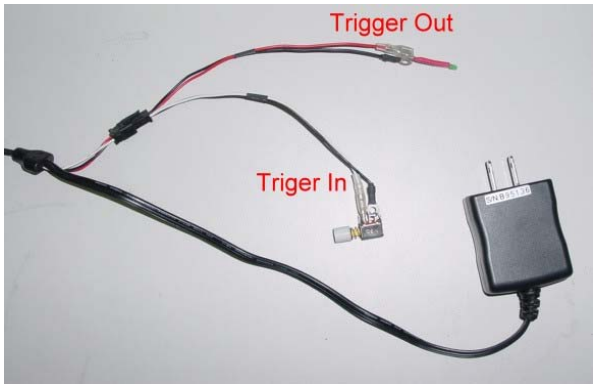
Link with External Device

To connect the Trigger In/Out device, all you need to do is connect the Trigger In/Out cable with the device's signal output/input (Like shown in diagram above) and link the black ground cable with the ground of the device if exist, the device will then be installed.



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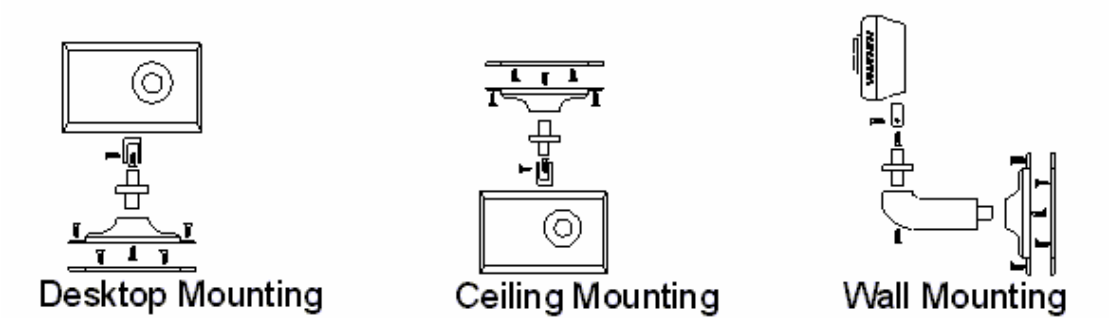
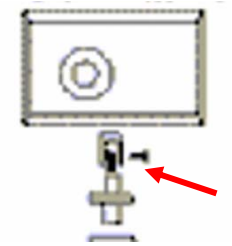
3. Assembling Camera

The information provided in this section will assist you in assembling and installing the product correctly. It is recommended to configure the camera before positioning the camera. For more information please refer to *section 4 Quick Setup / Installing Your Camera*.

3.1 Mounting Methods



eCAMit comes with a desktop mount upon purchase. To position the camera, fasten the camera with screws in the holes on the base of the mount. The default mount configuration is the desktop mount.



In case of ceiling mount, remove the screws attaching the mount to the camera and re-attach the mount to the spare hole on top of the camera.

Wall mounting leg is optional accessory upon request with additional charge. Please contact your local dealers for more information.

3.2 Outdoor Housings

eCAMit cameras are not designed to be placed outdoor. Due to the unexpected exterior environment, extra housing is required if you wish to install eCAMit cameras outdoors.

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4. Quick Setup / Installing Your Camera

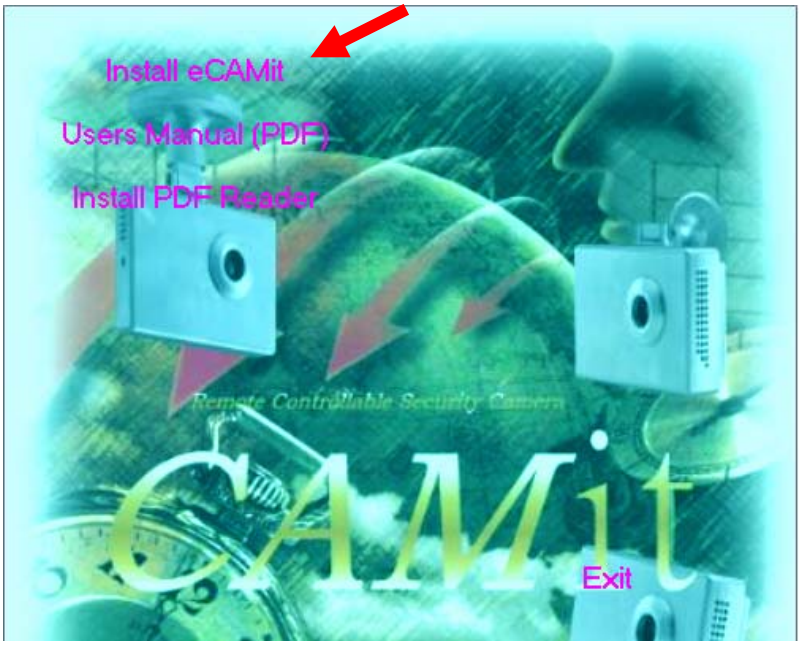
This section will teach you how to setup the camera step by step, including the installation of application software and using the software to configure the camera for the first time before connecting the camera to LAN.

Note. This section provides only quick setup, if details on the programs are required; please refer to *section 5 eCAMit Software Applications*.

4.1 Installing Software

1. Place the Application CD into your CD-Rom drive.

2. When the Install window show up, select **"Install eCAMit."** If the window does not load automatically, please go to my computers and double click on the CD-Rom drive with installation CD or run the setup.exe file under eCAMit directory.



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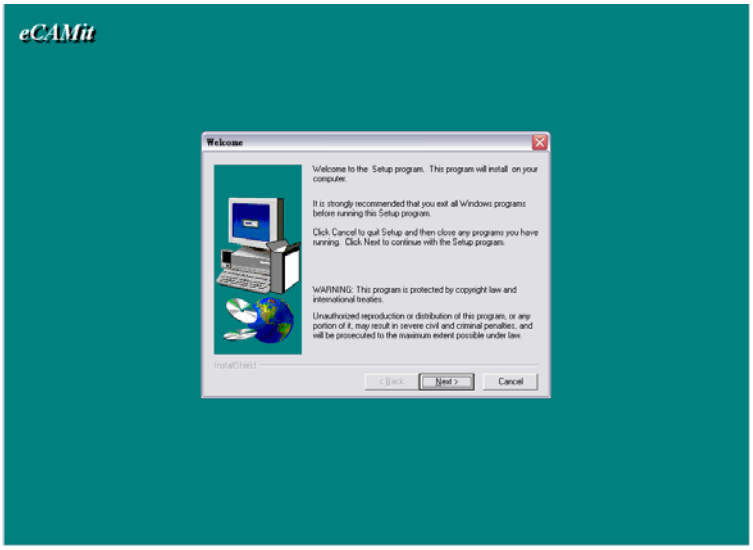
3. After selecting “Install eCAMit,” the Install Shield Wizard window should appear and guide you through installing. Please follow the instructions and press **Next**.


eCAMit
Welcome
Welcome to the Setup program. This program will install on your computer.
It is strongly recommended that you exit all Windows programs before running this Setup program.
Click Cancel to quit Setup and then close any programs you have running. Click Next to continue with the Setup program.
WARNING: This program is protected by copyright law and international treaties.
Unauthorized reproduction or distribution of this program, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under law.
InstallShield
< Back
Next >
Cancel

4. Choose Destination Location – If you wish to change the destination folder for eCAMit software, please press browse and select your desired folder else press **Next**.

Setup will install in the following directory.
To install to this directory, click Next.
To install to a different directory, click Browse and select another directory.
You can choose not to install by clicking Cancel to exit Setup.
Destination Directory
C:\Program Files\eCAMit
Browse...
InstallShield
< Back
Next >
Cancel

5. Start Copying Files – Please click **Next** to continue or **Back** to go back to Choose Destination Location.

6. Please wait while the program is installing.

7. Click **Finish** when installation is complete.

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4.2 Setup / Configure Your Camera

This section will show you the procedures to configure your camera.

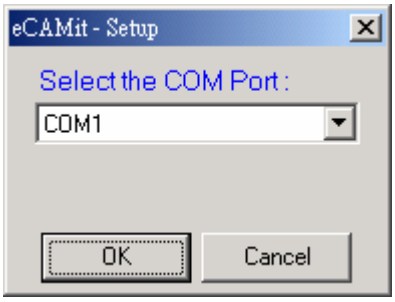
4.2.1 Connect Camera to Your Computer

1. Connect the RS232 cable to your eCAMit camera and attach the other end to your computer serial port.
2. Attach the RJ22 power supply to the power slot and connect it to local power supply point.
3. Double check if the *Power Indicator* and the *Status Indicator* is on.

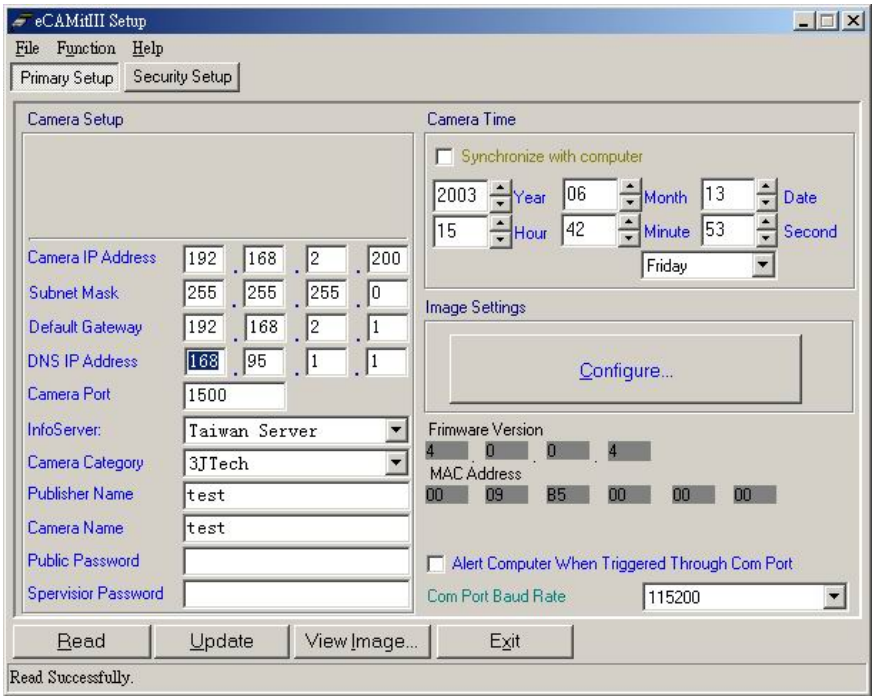
Having completed the installation procedure above *Section 4.1 Installing Software*, your camera should be on and ready for you to configure.

4.2.2 Configure your Camera

In order to configure your camera, you're required to have the setup or the eCAMit_AP program installed. The following procedure will show you how to setup the camera via the *Setup* program. For more information on camera configuration via eCAMit_AP please refer to section *5.2 Using eCAMit_AP Program*.



1 Click Start → Program → select eCAMit
2 Choose eCAMit_Setup
3 When "*Select the COM Port*" window appears please select the serial port your camera is connected to and click **OK**. If you select the wrong port, the setup program will shut down. Please make sure the connection is valid or select a different port if the camera is properly connected.
4 If the camera is properly



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connected to the computer and the correct serial port is selected, the eCAMit_Setup window should appear.

5 It is essential to assign an IP and port to the camera.

Note. Cameras **must** have a unique IP and in the same domain of LAN. Please refer to section *Section 5.1 eCAMit Setup* for more detail).

5.1 **Camera IP:** In the Camera IP section please assigned an unused IP address with 4 sets of valid IP digits.

5.2 **Submask:** Please insert the Submask address for the camera if necessary, else it is recommended to leave it as default value.

5.3 **Gateway:** Please insert a valid Gateway address at the Gateway section if necessary else, leaves it as default.

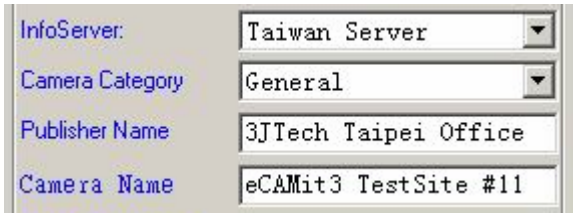
5.4 **Camera Port:** Please assign an IP port of the camera within the range given (80 or 1000-2000). It is recommended that each camera should have different port. For more detail please refer to *Section 5.1 eCAMit Setup.*

5.5 **Passwords:** If you wish to set a password for your camera, please fill the boxes else, leave it blank. For more details regarding to password please refer to *Section 5.1 eCAMit Setup* .

5.6 **Publisher Name:** Enter a desired Publisher Name for your camera in the box. Leave it blank if you wish to.

5.7 **Camera Name:** Enter a desired Camera Name for your camera in the box. Leave it blank if you wish to.

5.8 **Category:** Choose a desired camera category from the list. Leave it blank if you wish to.



5.9 **Info Server:** Select a server from the list or select blank if you do not wish to register on the server. For more detail please refer to *Section 5.1 eCAMit Setup*.

6 Once you have completed the configurations, please click **Update** button and wait till the program configures your camera hardware.

7 Click **Exit** when done, and unplug the cable off the camera.

8 You should have your camera ready to be positioned at the monitoring site when connected with the LAN and the power.

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5. eCAMit Software Applications

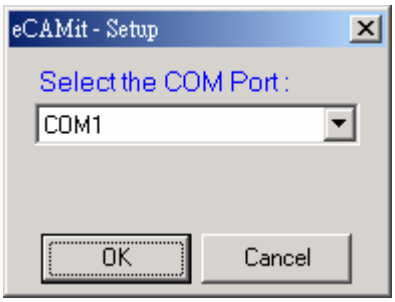
This section will explain the full functions of the software in the eCAMit package, including the eCAMit_Setup and the eCAMit_AP. For this section, you must install the program provided in the CD provided. For details regarding to installing the software, please refer to *section 4.1 Installing Software*.

5.1 eCAMit_Setup

eCAMit_Setup is used only when you have connected your camera directly to the computer using the DB9 (RS232) serial cable. As explained earlier, the Setup program is usually used when you wish to configure the camera directly from the computer for the first time configuration of the camera and not through LAN. You can also perform all its functions of eCAMit_Setup with eCAMit_AP program.

5.1.1 Start the Setup Program

When you run the eCAMit_Setup, the program will do a check if the camera is properly connected to the system, a window asking which port the camera is connected will load. You simply select the com port which your camera is connected and click **OK** to proceed to next window.



If wrong com port was selected or the camera is not properly connected, the program will terminate. If this happens, simply restart the program.

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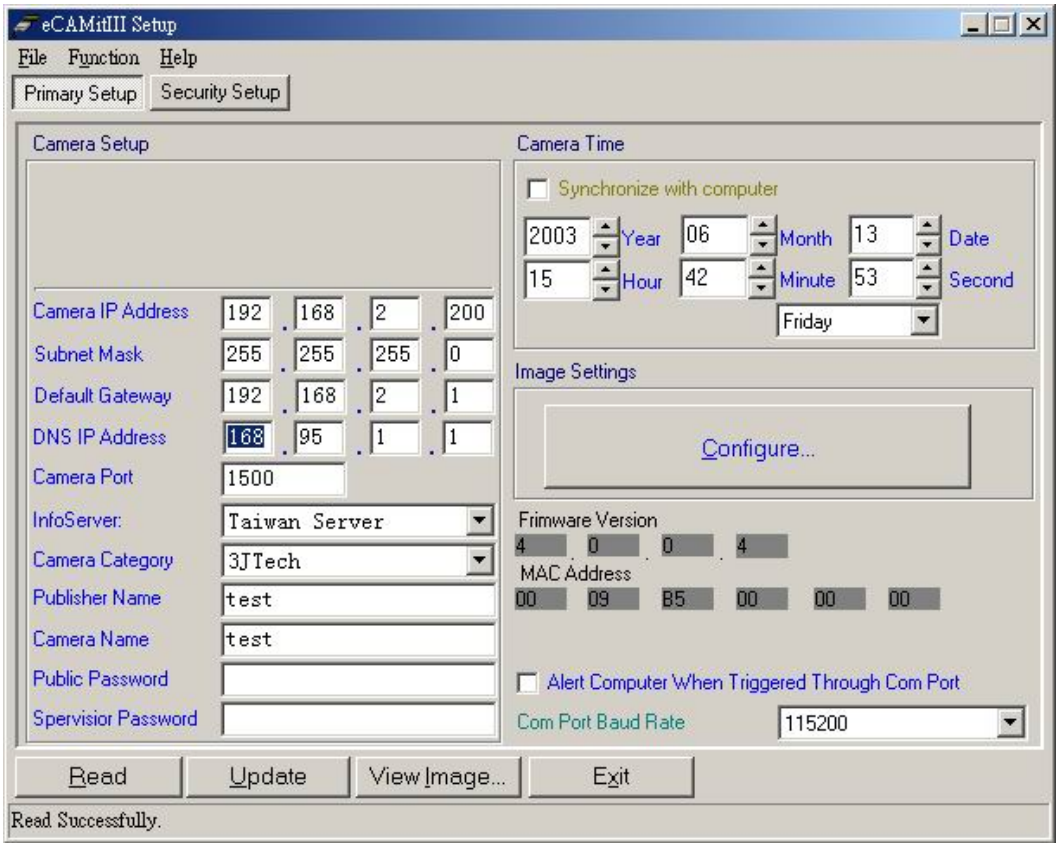
5.1.2 eCAMit_Setup – Primary Setup

This section will explain all the functions on the eCAMit_Setup program.

5.1.2.1 Camera IP

It is crucial to assign a valid IP address to the camera. To do so, simply enter the IP address you desire into the boxes provided. Each IP must be unique to each other. Problems may occur when you try to access 2 sites with the same IP



Note. If you're using a LAN, the camera is recommended to be in the same domain as your intranet / LAN, else you might not be able to find and connect to your camera within your network. The domain of the LAN is usually determined by the first 3 sets of digits of the IP address. It is recommended that you keep the first 3 sets of digit of the camera IP identical to your LAN.

5.1.2.2 Submask

Submask in network is used to divide different domain areas within your LAN. It limits how many clients you can have in one area. It is recommended to leave the submask as default if you are not required to have one. If your intranet / LAN demands for submask, please inform your ISP or Technical personnel to assist you.

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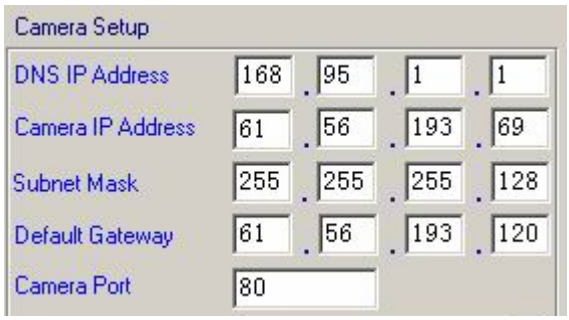
5.1.2.3 Gateway



Gateway provides and limits the information exchange between client computers in your intranet / LAN and the internet. Gateway for camera is not necessary unless you have special settings limiting access to the intranet / LAN. It is recommended to leave the Gateway as the default. If you require setting the gateway in order to access the camera please inform your network technician.

5.1.2.4 Camera Port

Camera Port is vital when connecting to your camera. To do so, simply insert the desire port number in the camera port box. Please fill in the camera port within the range given (80 or 1000-2000). Please memorize the port number you've configured camera with, as you will require the port number in the future to connect / configure your camera.

5.1.2.5 Passwords

Passwords are not essential for eCAMit cameras, but it is recommended to set passwords for protection. For extra security, eCAMit have 2 types of passwords; the Public and Supervisor Password. Each type of the passwords provides different function, please read the following for their abilities.

- **Public Password:**
  To set Public Password, please type in the preferred password in the public password section.
  Public password is used when you wish to limit others trying to browse the camera. Enabling public password will restrict anyone who's trying to view the camera. User will be required to input the password before viewing the camera.

Note. Public password will not restrict user changing the settings of your camera. To restrict other users to temp with camera settings please refer to next section.

- **Supervisor Password:**
  To set the Supervisor Password, please type in the desired password in the supervisor password box.
  Supervisor password is used for administrators trying to configure the settings of the camera.

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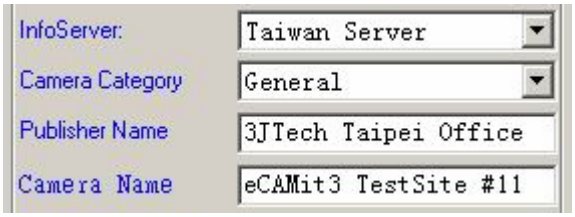
Note. By enabling supervisor passwords only will **not** restrict other users browsing your camera. It restricts only when other users are trying to temp with camera configuration.

Note. The Public and Supervisor passwords do not have to be identical. It is used to differentiate the user and the administrator. Therefore, if in case both passwords are required, it is highly recommended to differentiate them.

5.1.2.6 Camera Identifications



Camera Identifications are used to identify each individual camera. This is not an essential item for the camera as the IP assigned to the camera is unique, but the identifications will assist the user when browsing or *searching* for the camera. This section will show you how to set your camera identifications.

- **Publisher Name:**
  Publisher Name is the name of the person / company who set the camera. For example, “John Dow” or “3JTech”. It does not necessarily have to be a name, you can insert anything you like up to 23 characters and numbers.
- **Camera Name:**
  Camera Name is used to distinguish cameras. For example, “Front Door” or “Kitchen”. You can insert up to 23 characters and numbers for camera name.
- **Category:**
  This is a function for user to further categorize the camera. Simply click the drop down menu and select which category the camera will be used in. Else you can leave it blank.

5.1.2.7 Info Server:

The Info-Server is a computer that manages the information of multiple cameras. It provides the communication and link between the users and the cameras. To register on 3JTech’s free server service, simply choose one of the servers on the list. Once registered, you’ll be able to *search* for your camera via the *eCAMit_AP* program or Internet Explorer browser. This function is particularly handy for user who’s abroad and do not remember their camera’s IP address and Port number. For more information on search function please refer to the *5.2.5 search* section.

For users who wish not to use 3J Tech’s server, you can insert your own server’s IP

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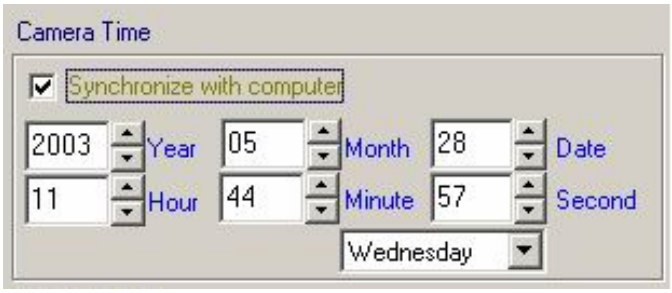
address via the eCAMit_AP. For more information, please refer to *5.2.8 Change Camera Settings* section.

5.1.2.8 Camera Time

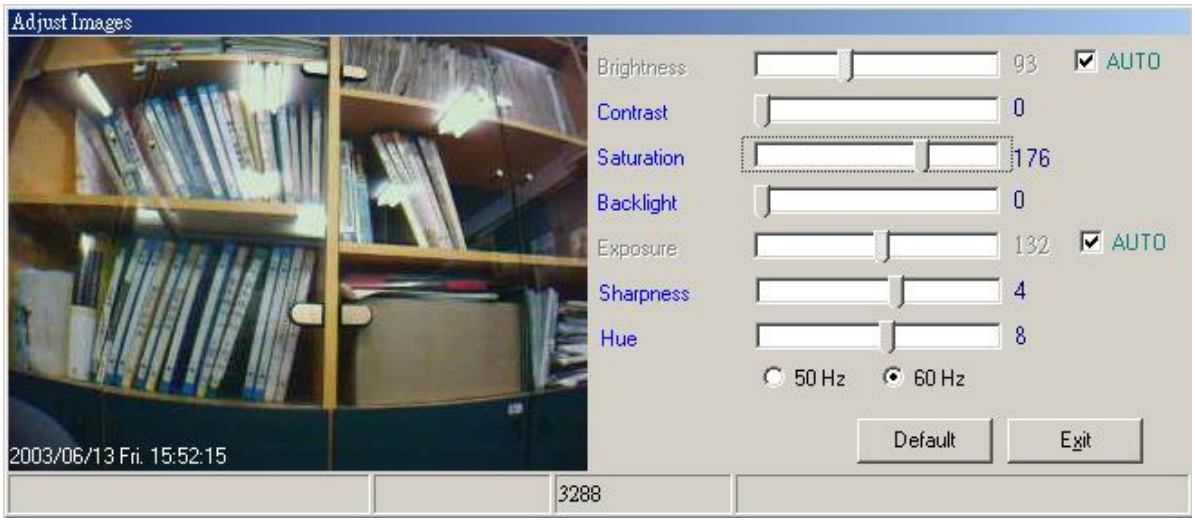
Every eCAMit III camera has built-in real time. With this new function, you will be able to know the exact time at camera site, instead of calculating the time difference while you're abroad. Together with this real-time click, you will be able to let the camera itself turn into guarding mode at specific time and alert the user of unusual situations.



Please enter the time you wish to set for your camera. You can also synchronize the time with you computer. Please check Current Computer Time, and when you update the camera the time on your camera will be synchronized with your computer.

5.1.2.9 Image Settings

You will be able to configure your image settings through RS232 before you place the camera on the site. To configure, please free the **configure** button, and the menu should load. Please adjust the scroll bar until you're satisfied, the default are auto.



5.1.2.10 Adjusting Baud Rate

You will be able to adjust the baud rate for your eCAMit camera through RS232. This function will only effect direct connection via RS232. It will have not effect the transfer speed over the network. This function is designed for system integrators regular users will not need to adjust it.

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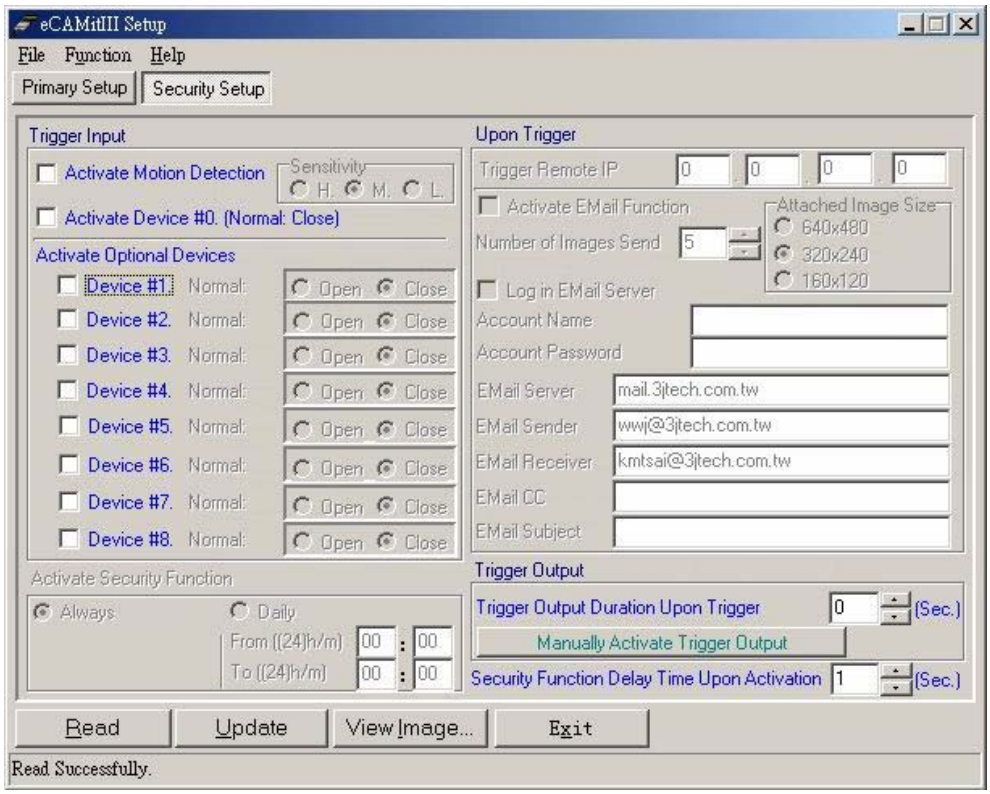
5.1.3 eCAMit_Setup – Security Setup

To enter the Security Setup, please click on the Security Setup Button on the top of the window. This section contains all the security related setup for you eCAMit III camera.



5.1.3.1 Motion Detection

Motion detection is one of the built-in functions of your eCAMit camera. The camera is able to detect moving objects and alert remote computer, e-mail or other external devices. This section will show you how to enable and setup motion detection.

To enable Motion Detection (MD) simply click on the checkbox before Motion Detection and you have enabled the function.

- **MD (Motion Detection) Sensitivity:**
  Upon enabling the MD, you can now set the sensitivity of your camera motion detection.

  You can choose between 3 different sensitivities, Low, Med., and High. Simply click the option before each sensitivity level to set the MD sensitivity level of your camera.

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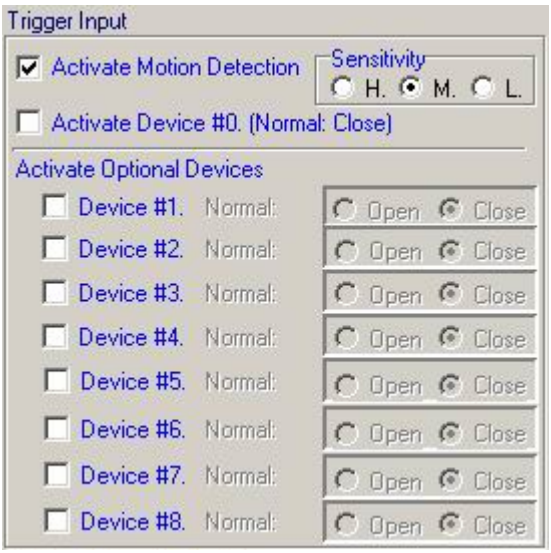
5.1.3.2 Trigger In


Trigger Input
Activate Motion Detection
Sensitivity
H. M. L.
Activate Device #0. (Normal: Close)
Activate Optional Devices
Device #1. Normal: Open Close
Device #2. Normal: Open Close
Device #3. Normal: Open Close
Device #4. Normal: Open Close
Device #5. Normal: Open Close
Device #6. Normal: Open Close
Device #7. Normal: Open Close
Device #8. Normal: Open Close

To enable trigger in function, simply click on the check box next to Trigger In. Providing the external Trigger In / Out connector on the power cord is connected to the external device, Trigger in function will enable the user to connect external detection device onto our camera. For example, smoke detector or Infra-red sensor for night vision. When camera is triggered by external devices, it will alert the *remote PC* or *e-mail* to an mail account pre-set and alert the user that it has been activated.

Device #0 are the standard trigger in for eCAMit III camera, on the other hand device #1~8 are optional device to be purchased for upgrading your eCAMit III camera.

Note. If the Trigger In / Out is not connected and the *Trigger In* function is enabled. The camera will act as if it has been triggered due to the hardware open wiring of the camera.

The Following Options are only available when Motion Detection or Trigger In are enabled

5.1.3.3 Trigger IP

This IP address is used when you have enabled the Motion Detection or Trigger In Function. Simply insert the computer IP which the camera will alert when it has been triggered. If the Motion Detection or Trigger In is not enabled, Trigger IP will not have any effect.

Note. In order to alert the computer, the corresponding computer must be running the eCAMit_AP.

Note. Trigger IP function will be disabled if the *E-Mail Function* is enabled.

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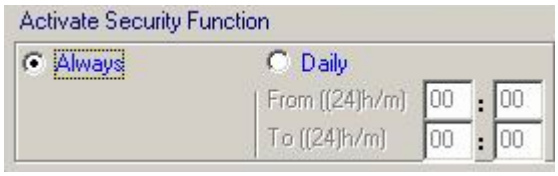
5.1.3.4 Activate Security Function:



You will be able to choose between 2 different types of activate your camera security function; Always, and Daily. If always is chosen, the camera will turn into security mode at all time when you have enabled Trigger In or Motion Detection function. On the other hand, if Daily is chosen, the camera will only activate the security mode at given time. The time is based on the internal camera clock.

5.1.3.5 Alert Trigger Out Time:

When camera detects moving objects, the camera will trigger out signals via the special power cord (Please refer to *section 2.3 Power Supply Adaptor*) of eCAMit to other external devices such as lights or alarms. Simply type in the duration of the trigger out signal, and the camera will kept trigging the device until the duration is over.

5.1.3.6 Security Function Delay Time upon Activation

This function is the delay time for your camera to initiate its security device in order for you to have time to exit the security range. Enter the time in seconds that you wish the camera to delay the security.

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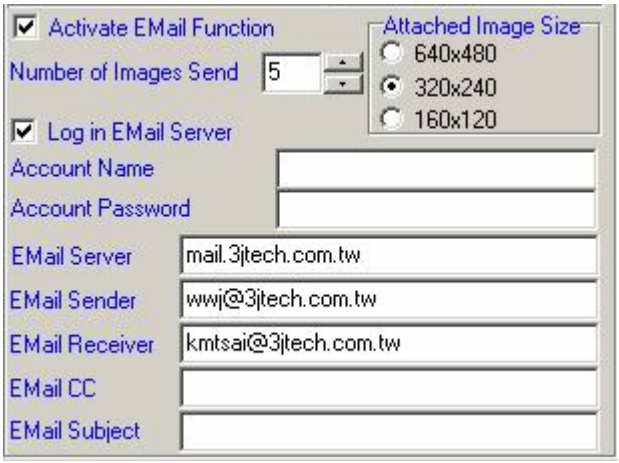
5.1.3.7 E-Mail Function



To enable E-Mail function, please check the box for "*Enable Mail Function*". The e-mail function for eCAMit camera is to alert the user via e-mail when it has been activated by intrusion. Once the camera is triggered, it will send the number of JPEG files to an pre-set e-mail address. To set up the e-mail function, please follow the instructions below.

- **EMail Server:**
  Here, you have to insert the domain SMTP server of the e-mail ISP you wish the camera to use. You **must** have an SMTP server inserted here else you will not be able to send e-mail. If the mail server domain name is not known, please contact your ISP for details regarding to the domain server.
- **EMail Sender:**
  This is where you address the ID of the camera which sent the JPEG images. You can insert any valid e-mail address up to 23 characters and numbers. For example, frontdoor@3jtech.com.

Note. Some SMTP server will check if the e-mail is valid for ISP's system. In that case you must insert a valid e-mail in order to by pass the ISP system.

- **EMail Reciever:**
  This is the destination e-mail address which the camera shall send to. Please insert the e-mail address which will be receiving the JPEG files send by camera. For example. you@3jtech.com.tw.
- **EMail CC:**
  The camera can also send a copy of pictured mail to a different address.
- **EMail Subject:**
  You will be able to set the subject for the e-mail sent. For example, Living Room or Kitchen.
- **Log In EMail Server:**
  If your ISP provider requires to log into their system before sending an e-mail. Please check the Log In EMail Server, and enter your account name and Password into the space provided.

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Note. If the E-Mail Function is enabled, the Trigger IP alerting remote computer will be **disabled**. You can **only** chose between *Trigging remote computer* **or** alert by e-mail when the camera is triggered.

5.1.4 Read Image

You will be able to test your image on your camera. Please click on the Read Image button to initiate the image testing.

The Image windows should appear as soon as you've clicked the button. To start retrieve the image, please press **Start**. You will also be able to change the image size. To change the image size please select from 640x480, 320x240, and 160x120.

To quit the window, please select **Exit**.

If you only wish to receive 1 image, please uncheck the **Continuous Read**.

Note. Due to the baud rate of RS232, therefore the receiving speed will be much slower then the actual speed when browsing over the net.

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5.1.5 Adjusting Image

You will be able to adjust the image according to the environment of camera site. Parameters such as Contrast, Brightness, Saturation, Backlight and Exposure can be adjusted accordingly. The default for these attributes are auto, we recommend not to modify them unless it is necessary.

To modify, please click on the Adjust Image at the bottom of setup to enter the adjust image menu.

To adjust, please move the scroll bar until desired image. Please click **Exit** when complete.

5.1.6 Update / Read Camera Configuration

5.1.6.1 Update Camera Configuration

Simply click on the **Update** button once you have finished inserting all attributes to configure your camera.

Note. You **must** update the new attributes to the camera before exit setup program. Else the camera will retain previous configurations.

5.1.6.2 Read Camera Configuration

Click on the **Read** button to retrieve current camera settings. This will retrieve and display the current information stored in eCAMit camera.

Note. If you click on **Read** button, the unfinished new configuration will be overwritten. It is recommended to **Update** the new settings before click the **Read** button.

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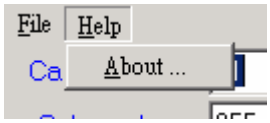
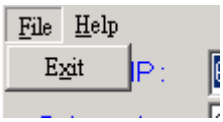
5.1.7 Help



Select the File menu bar *Help* → *About*. This will display the current software version. You will find other information such as Firmware version, MAC address on the main setup window.

5.1.8 Exit eCAMit_Setup



Simply click on the Exit button on the panel or Select File menu bar *File* → *Exit* to exit the system.

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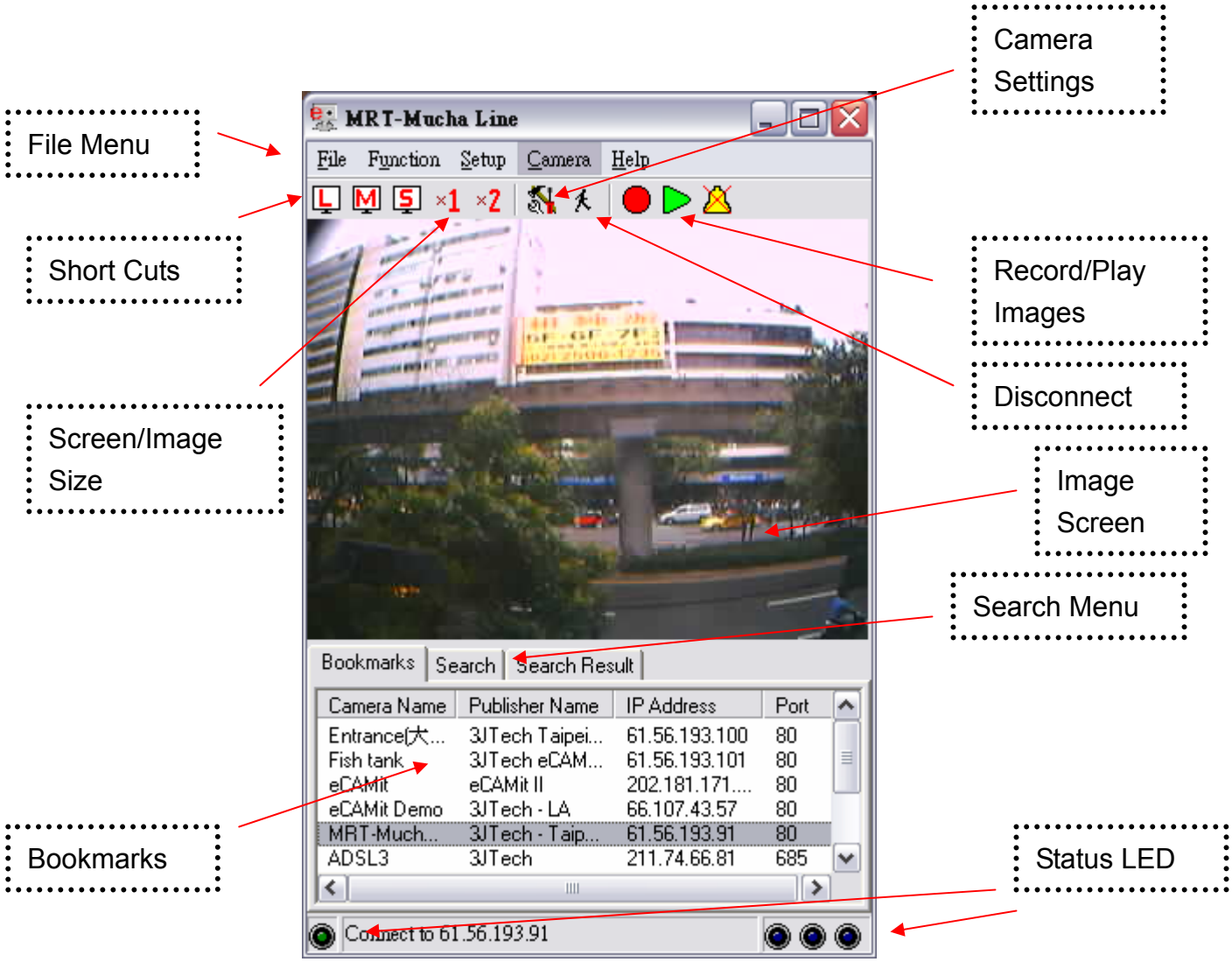
5.2 Using eCAMit_AP Program

eCAMit_AP is a powerful program provided by 3J Tech for you to browse your camera. The eCAMit_AP program is required for establishing connections between your computer and the camera for browsing / editing configurations of your camera. Unlike other IE based browsing IP camera, with eCAMit_AP, you can do much more.

5.2.1 eCAMit_AP Interface



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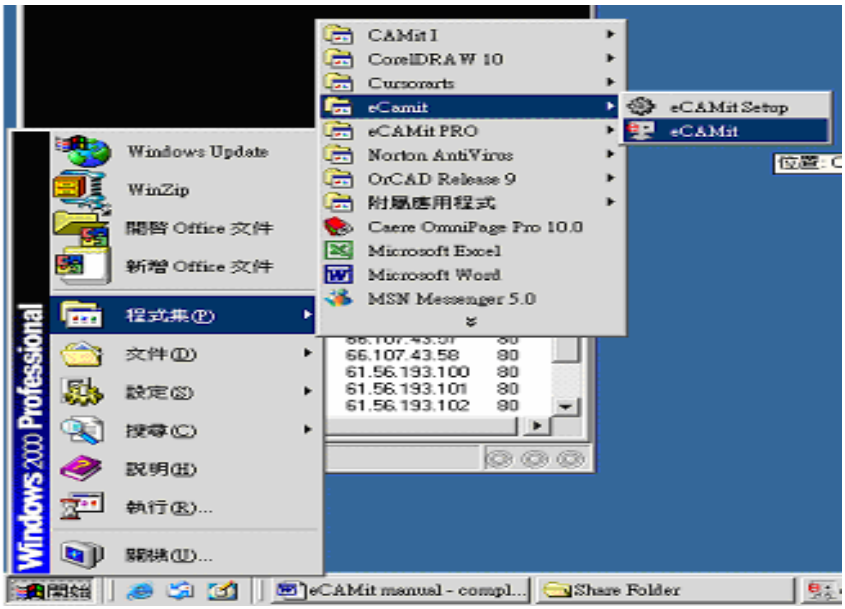
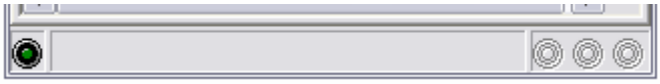
5.2.2 Start the Program

To initialize the program, simply select eCAMit_AP from the *Start* menu's *eCAMit* directory.



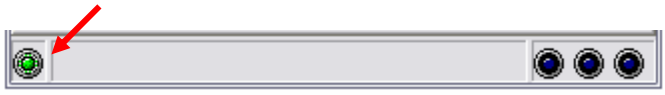
Once the program is started, the main window will load up. The following sections will show you all the functions on the application.

5.2.3 Status LED



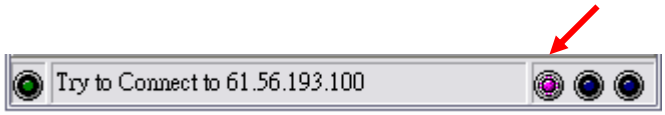
If you look to the bottom of the program window, you will find 1 LED display icon on the left and 3 on the right. These LED icons will display the current status of the camera. Messages regarding to the LED will show when your mouse cursor move on these LEDs.

Camera Connected:



When the camera has established connection, the green light on the right will lit.

Motion Detection:

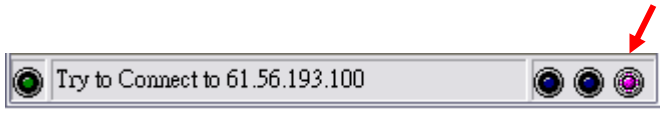


When Motion Detection is enabled, the left button will lit.

Trigger In:

When Trigger in is enabled, the middle button will lit.

Trigger Out:



When the Trigger Out is active, the right most button will lit.

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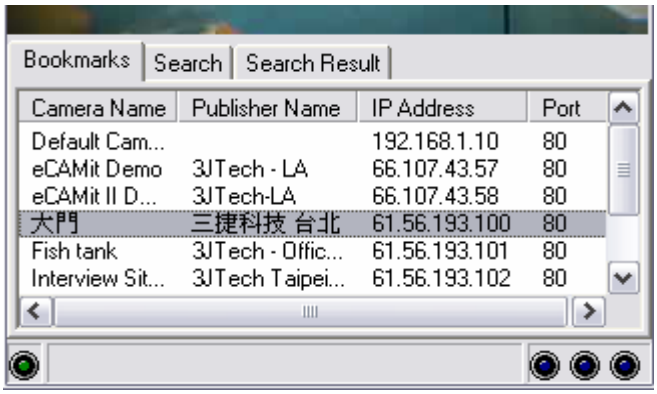
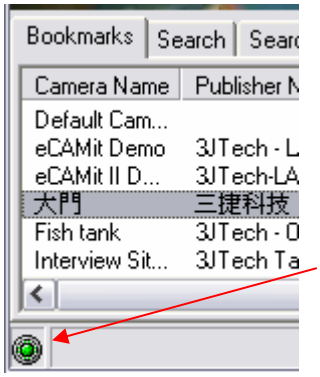
5.2.4 Connect to Camera via Bookmarks

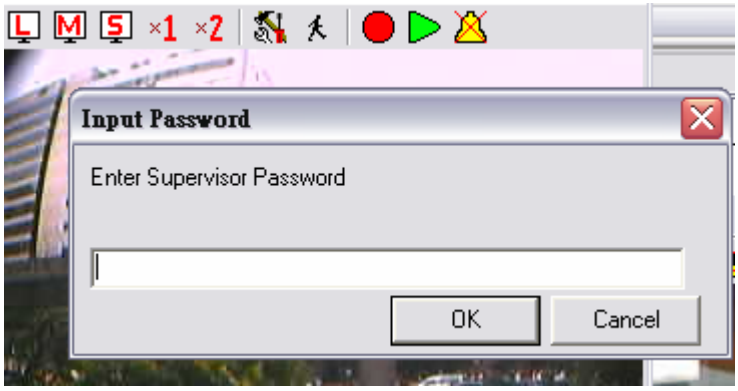
Bookmarks are located at the bottom of the application. Simply click on any of the sites in the bookmark and you will be link to the relative camera. When you first installed the software, there should be some default bookmarks of 3J Tech on the list. Simply click on any of the bookmarked sites to experience eCAMit cameras.





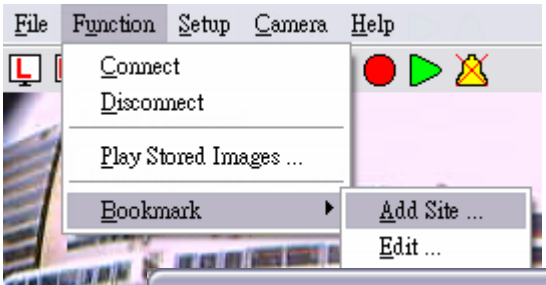
Once the connection between your PC and the camera is established, the LED icon on the bottom right of the software will begin to flash green light.

You might be asked for passwords when trying to access the camera depending on the camera security level. If the password does not match the one in the camera, the system will close your connection to the camera.



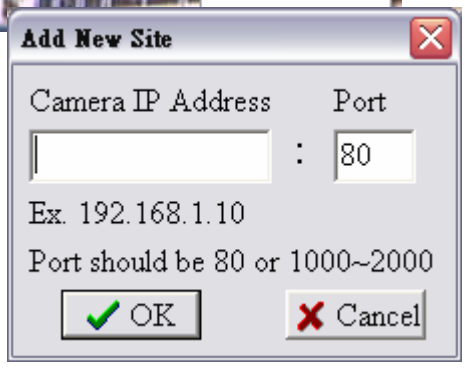
5.2.4.1 Add Site to your Bookmark

To add a new site to your bookmark, simply select from File menu *Function* → *Bookmark* → *Add Site* from the top of the software window.



You can also add a bookmark via search, for more detail, please refer to the *5.2.5.1 Search Results* section of Search Camera.

Once selected a menu should appear asking for the Camera IP Address and the Port. Fill in the IP address and the port number of the camera you wish to be placed



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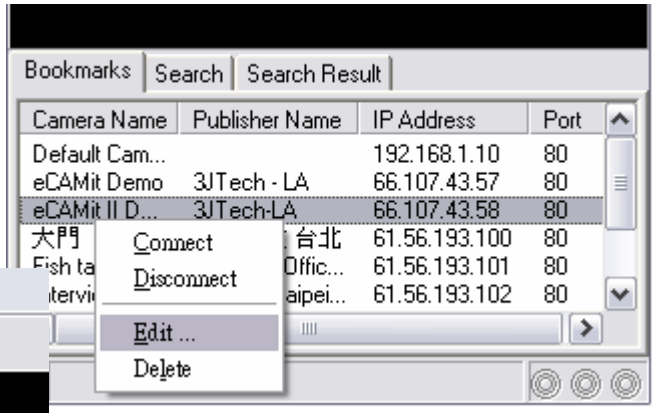
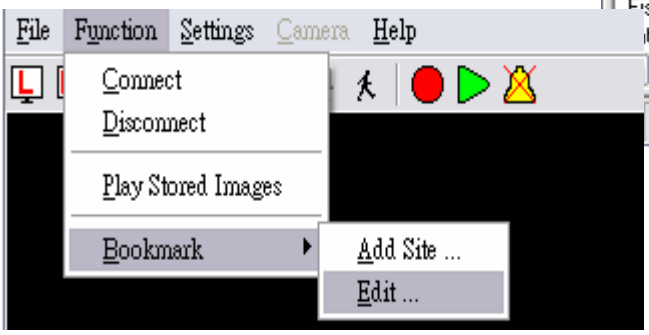
on the bookmark and click **OK** when finish. You are **not** required to provide camera identifications because the program will automatically retrieve information stored in your camera.

For more information on how to setup camera IP address, port, and Camera Identifications please see *Camera Setup section for RS232 connection* or *Change Camera Setting for LAN connection*.

5.2.4.2 Edit Bookmark IP address / Port

There are 2 methods to edit a bookmark. You can simply right click on the bookmark you wish to edit and select *Edit*.

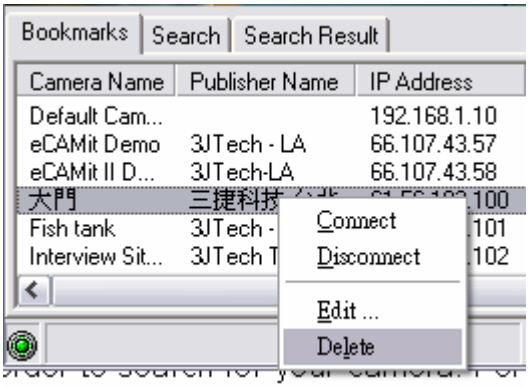




You can also select from File menu *Function* → *Bookmark* → *Edit…* from the top of the software window.

5.2.4.3 Remove Bookmark of List

To remove a bookmark simple right click on the bookmark and select delete.



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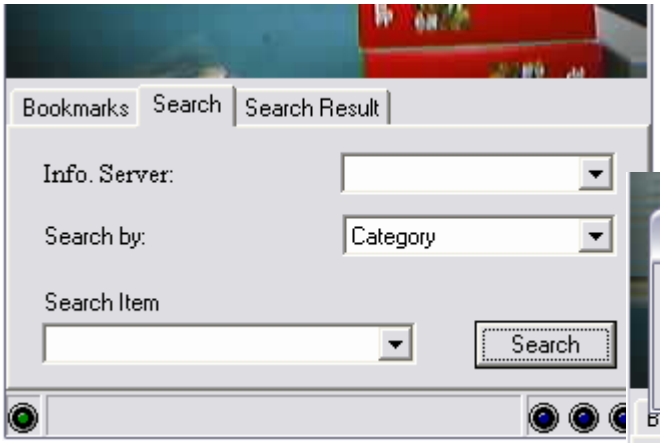
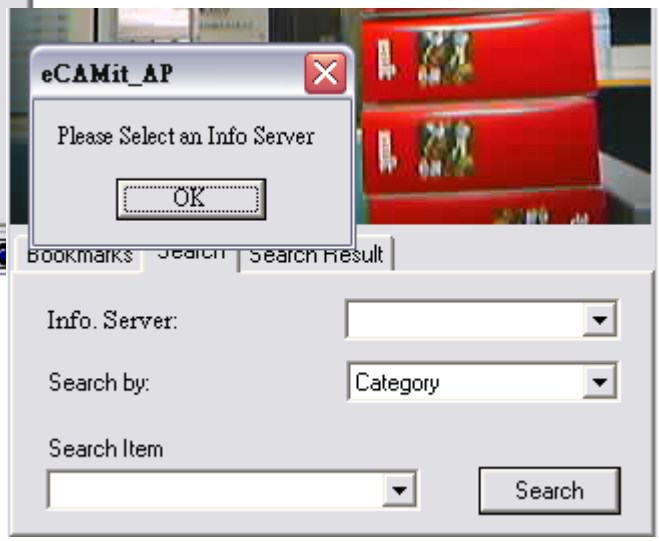
5.2.5 Search Camera

Note. You must be registered to Info Server in order to search for your camera. For more information please refer to Info Server section for direct RS232 Connection or Camera Setup for *LAN connection*.

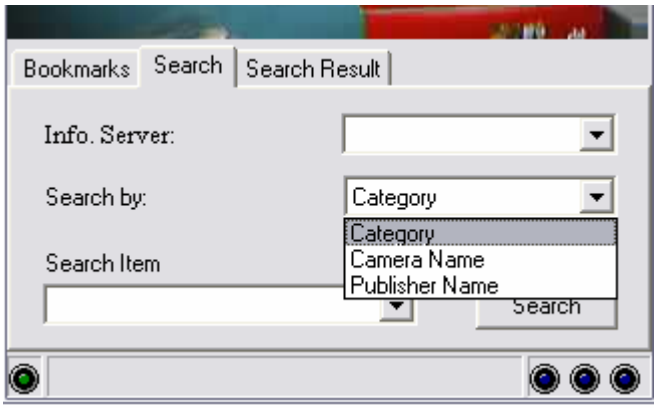


Click the *Search* panel below the camera image to begin your search.



You can begin your search once you are in the search panel. Please select the Info Server which the camera is registered. Info Server **must** be selected in order to proceed your search. The system will notify you if you haven't select a server yet.

Once you have selected the server, you can now search the camera via 3 different methods; *Category, Publisher Name and Camera Name.* To choose the types of search method, simply select the desired search system from the **Search by:** list.



- **Category:**
  This is where you search the camera using the category which they have been set to. To search, choose one category of the *Search Item* list and press **Enter** or click **Search** button. For more information regarding to setup the camera category please refer to *eCAMit_Setup Camera Identification for direct RS232 connection* and *eCAMit_AP Camera identification for LAN connection*.
- **Camera Name:**

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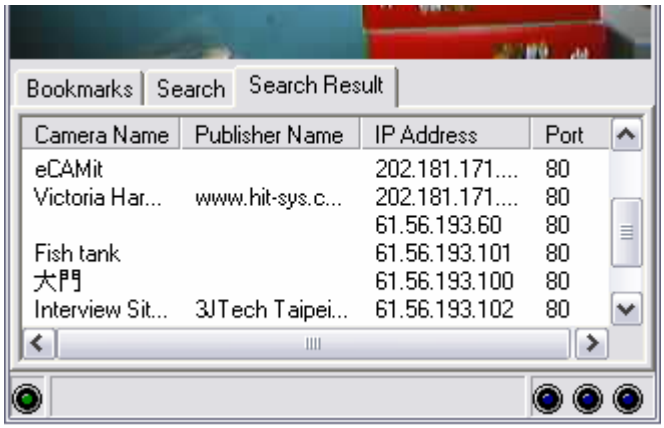
Choosing camera name will allow you to search the camera via its Camera Name. Simply type in the desired search camera name at the *Search Item* box and hit **Enter** or click **Search** button. For more information regarding to setup the camera category please refer to *eCAMit_Setup Camera Identification for direct RS232 connection* and *eCAMit_AP Camera identification for LAN connection*.

- **Publisher Name:**

  When chose publisher name, you can search the camera's publisher name by typing in the desired search publisher name at the *Search Item* box and hit **Enter** or click **Search** button. For more information regarding to setup the camera category please refer to *eCAMit_Setup Camera Identification for direct RS232 connection* and *eCAMit_AP Camera identification for LAN connection*.

5.2.5.1 Search Results



After you've made your search, the *Search Result* will show up if the matching results found.

In the case of no matching results found, the system will alert the user.

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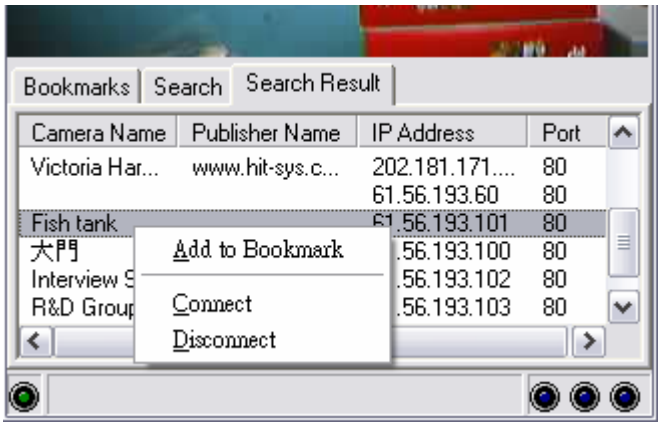
Simply click on the camera you were looking for and the program will establish connection and let you do the browsing.

Right click on the camera will let you connect / disconnect or add the camera to your bookmark. Simply select **Add to Bookmark** to add the camera to your bookmark.



5.2.6 Camera Image Size

With our eCAMit_AP software, you will be able to choose between the total of 6 images sizes for viewing. eCAMit camera has 3 different hardware resolutions to chose when browsing; Full size, Half Size, and Small Size. Different image resolution will affect the smoothness and the file size when recorded.

Not only eCAMit_AP provides hardware resolution but further more provide the user with software blown up screen image sizes. You can choose between seeing the images with its normal size or double the image size. The blow up image is digitally done within your system; therefore it will not affect the smoothness or the stored file size.

Note. Software enlarged images can be blurry and not as clear as the hardware images due to the digital zooming process.

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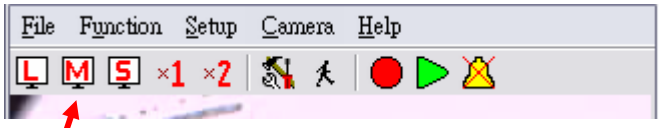
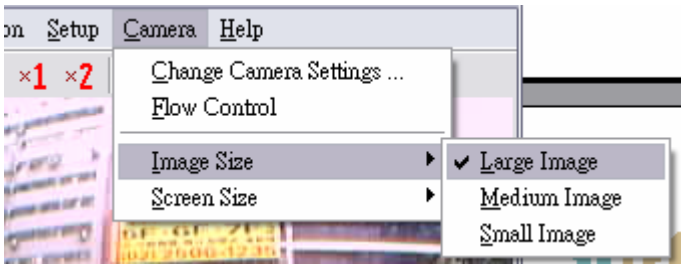
5.2.6.1 Change Image Size

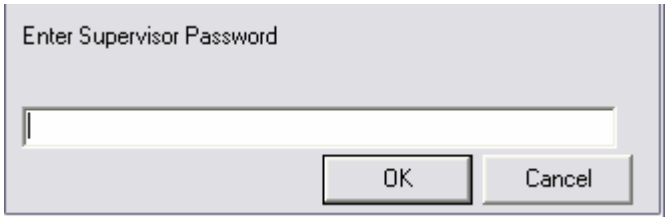
To choose the hardware image size, you can simply click the shortcut buttons on top of the image screen.



You can also select from File menu's *Camera* → *Image Size* and chose from the list.

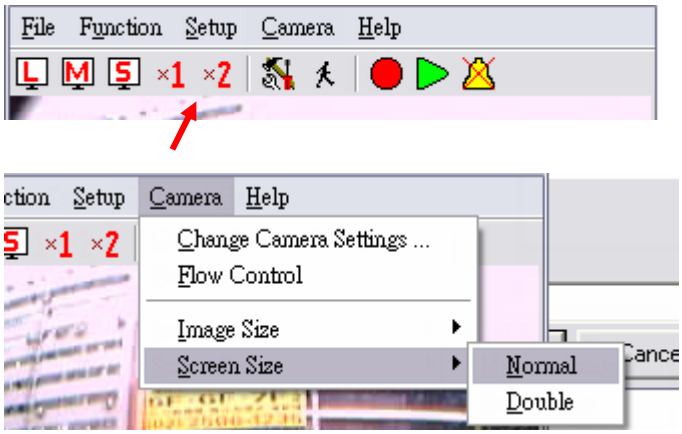


Supervisor Passwords may be required when you are tempting to change the image size. This is because the information regarding to image size is embedded in the camera. Thus changing it requires authorization from the administrator.



5.2.6.2 Change Screen Size

To choose the screen size simply click on the shortcut buttons on top of the image screen or you can select from File menu's *Camera* → *Screen Size* and chose from the list.



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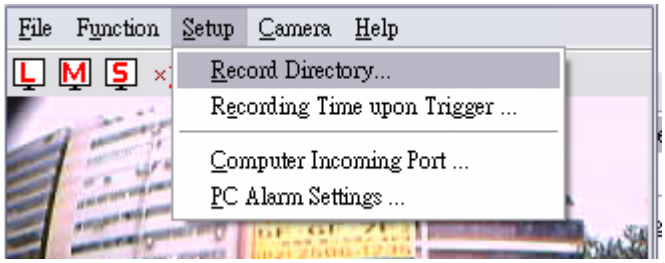
5.2.7 Recoding / Play Images

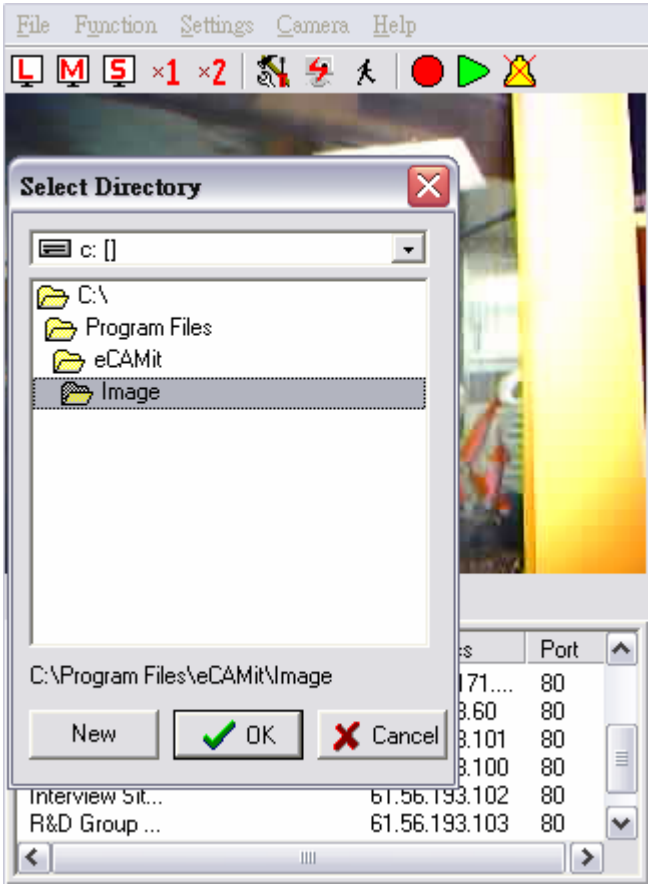
This section will show you how to record and play image files.

5.2.7.1Setting Recorded Images File Folders

The system will save the recorded files in pre-set directory. The default directory will be under the *Images* folder of *eCAMit*. You may wish to change to your own folder, to do so please select the option *Set Recorded Image Files Directory* from File menu *Setup* → *Record Directory….*



After the selection is hade, simply choose the folder you desire and click **OK**. You can also make a new directory by click on **New** and insert the directory name.



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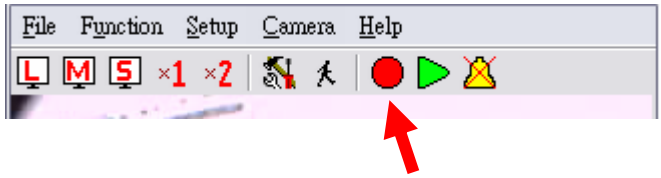
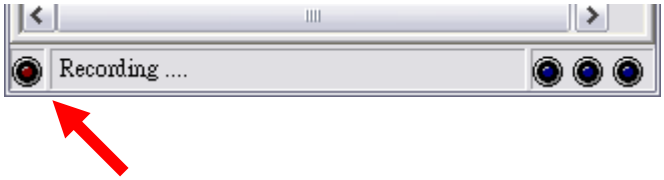
5.2.7.2 Recording Images

eCAMit_AP software can let you record the image on the spot during viewing. Simply Click on the *Recording* shortcut button on top of the image screen to start recording. Click the button again will end the recording session.



This will begin saving the motion JPEG files in the directory folder.

During Recording, the indicating LED at the button right of the software will turn into red and display messages alert you that it is doing recording.

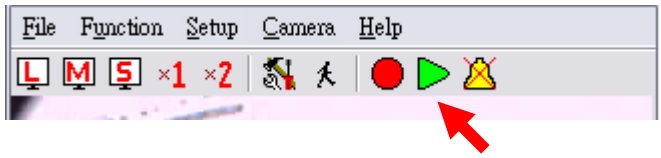


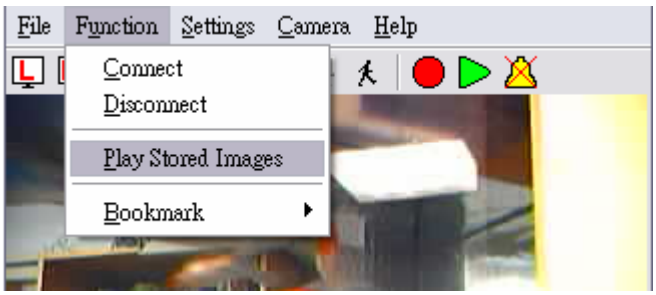
Note. The recording will continue endlessly until user stop the system or the hard disk is out of space.

eCAMit can also set automatic recording image when you're not at the PC end. For more information on auto recording please refer section *5.2.9 Change Trigger Status* and *5.2.13 Automatic Image Recording*.

5.2.7.3 Play Stored Images

To play recorded images, simply click on the *Play* button on top or the image screen or select from File menu *Function* → *Play Stored Images*.





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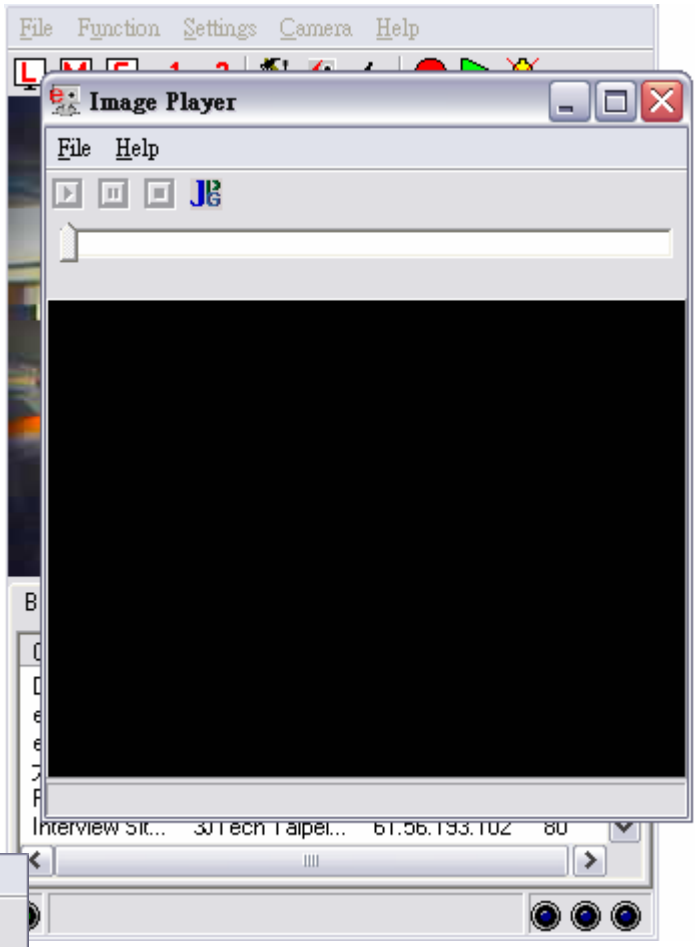
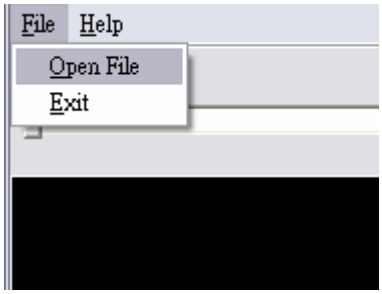
After selection, an *Image Player* window will load up.

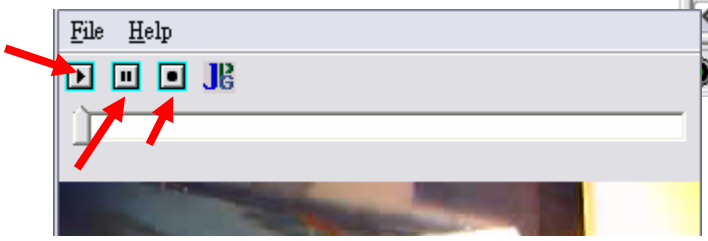


To choose the file to play, please select *File* → *Open File* and select the file from the list.

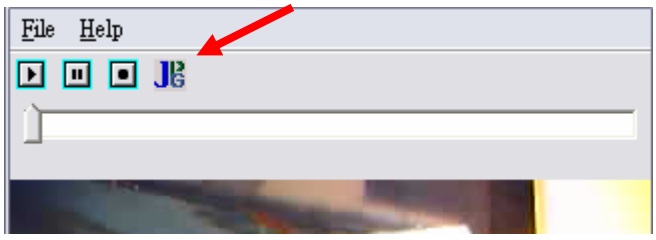


The Image Player should play the file automatically.

To play the file again click the *Play* button, click *Pause* button to pause the image, and *Stop* button to stop.



An extra function is added on the eCAMit_AP software; it is the ability to extract a frame and save into JPEG file. To do so, simply pause at the frame which you wish to extract and click *Save Image to File* button, choose the directory folder, insert the filename you wish and click **save**.



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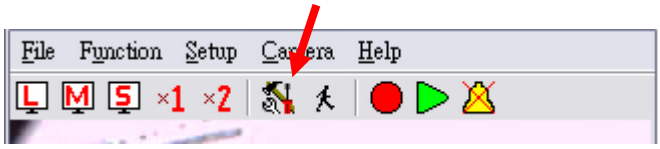
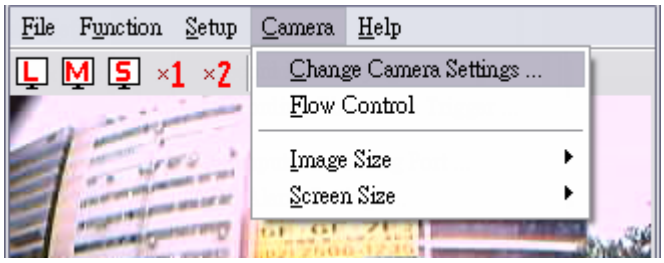
5.2.8 Change Camera Settings

You are also able to change the camera settings without having to connect the camera directly to you PC. This function of eCAMit_AP has integrated all the functions of eCAMit_Setup and does not require direct connection between the camera and the PC.

This function is great tool for users who travels regularly or having the camera at positions difficult to move around.

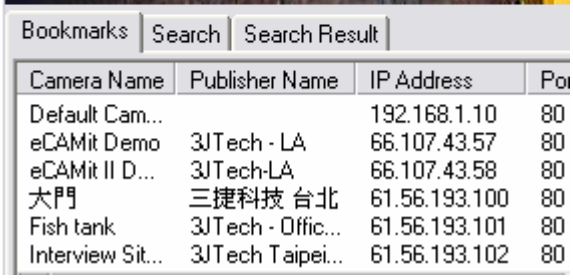
To enter the *Change Camera Settings* windows, simply click on the *Change Camera Settings* shortcut button or by selecting File menu *Camera* → *Change Camera Settings*. You **must** have a valid connection established in order to change the camera setting.

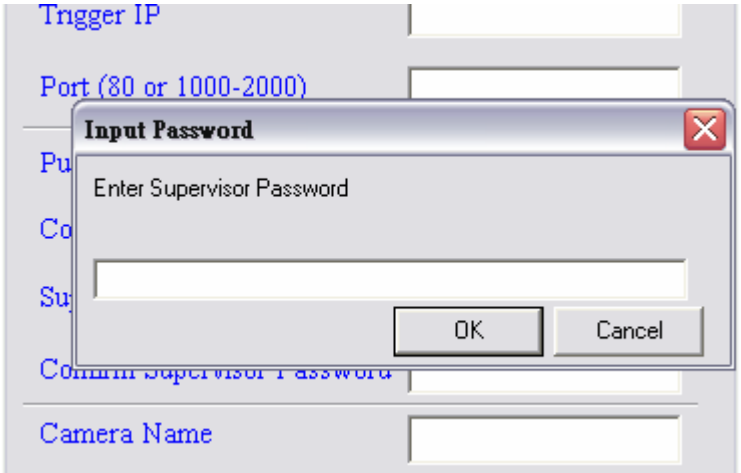




The system will warn you if you have not had a valid connection between the camera and the PC.

If you have set the supervisor password for the camera connecting, the system will demand for a valid password to be inserted before entering the camera setup window.





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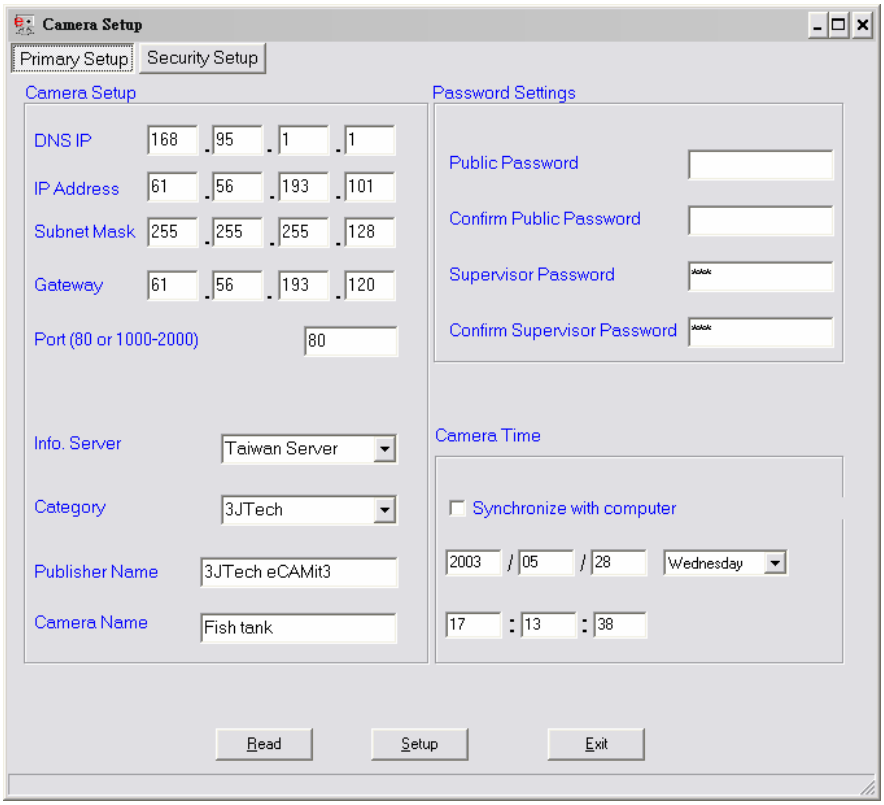
The window display all current camera settings should appear after connections is established between PC and the camera.

5.2.8.1 Primary Setup



Camera IP

It is crucial to assign a valid IP address to the camera. To do so, simply type in the IP address you desire into the boxes provided. Each IP must be unique to each other. Problems may occur if you have identical IP on 2 different sites when trying to access your camera.

Note. If you're using a LAN, the camera is recommended to have the same domain as your intranet / LAN, else you might not be able to find and connect to your camera within your network. The domain of the LAN is usually determined by the first 3 sets of digits of the IP address. It is recommended that you keep the first 3 sets of digit of the camera IP identical to your LAN.

Submask

Submask in network is used to divide different domain areas within your LAN. It limits how many clients you can have in one area. It is recommended to leave the submask as default if you are not required to have one. If your intranet / LAN demands for submask, please inform your ISP or Technical personnel to assist you.

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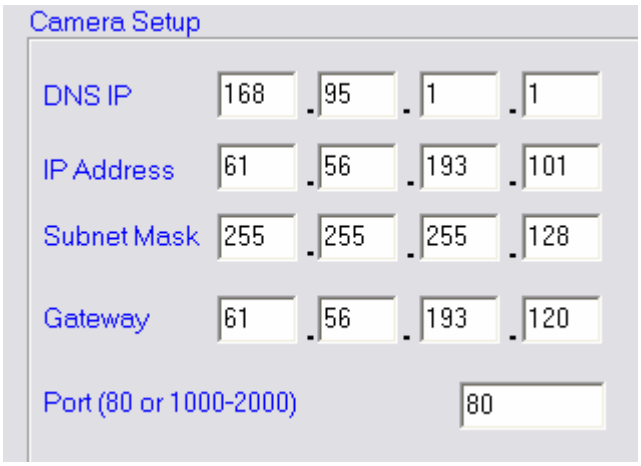
Gateway

Gateway provides and limits the information exchange between client computers in your intranet / LAN and the internet. Gateway for camera is not necessary unless you have special settings limiting access to the intranet / LAN. It is recommended to leave the Gateway as the default. If you require setting the gateway in order to access the camera please inform your network technician.

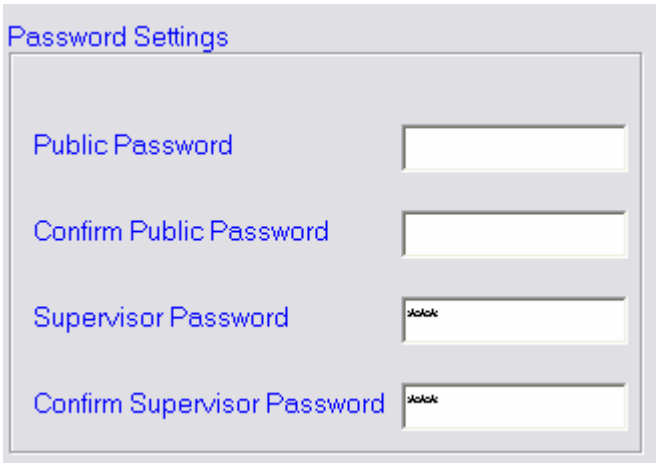


Camera Port

Camera Port is vital when connecting to your camera. To do so, simply insert the desire port number in the camera port box. Please fill in the camera port within the range given (80 or 1000-2000). Please memorize the port number you've configured camera with, as you will require the port number in the future to connect / configure your camera.

Passwords

Passwords are not essential for eCAMit cameras, but it is recommended to set the password for protection. For extra security, eCAMit have used 2 types of passwords; the Public and Supervisor Password. Each type of the passwords provides different function, please read the following for their abilities.



- **Public Password:**
  To set Public Password, please type in the preferred password in the public password section.
  Public password is used when you wish to limit others trying to browse the camera. Enabling public password will restrict anyone who's trying to view the camera. User will be required to input the password before viewing the camera.

Note. Public password will not restrict user changing the settings of your camera. To restrict other users to temp with camera settings please refer to next section.

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- **Supervisor Password:**
  To set the Supervisor Password, please type in the desired password in the supervisor password box.
  Supervisor password is used for administrators trying to configure the settings of the camera.

Note. By enabling supervisor passwords only will **not** restrict other users browsing your camera. It restricts only when other users are trying to temp with camera configuration.

Note. The Public and Supervisor passwords do not have to be identical. It is used to differentiate the user and the administrator. Therefore, if in case both passwords are required, it is highly recommended to differentiate them.

Camera Identifications

Camera Identifications are used to identify each individual camera. This is not an essential item for the camera as the IP assigned to the camera is unique, but the identifications will assist the user when browsing or *searching* for the camera. This section will show you how to set your camera identifications.

- **Publisher Name:**
  Publisher Name is the name of the person / company who set the camera. For example, “John Dow” or “3JTech”. It does not necessarily have to be a name, you can insert anything you like up to 23 characters and numbers.
- **Camera Name:**
  Camera Name is used to distinguish cameras. For example, “Front Door” or “Kitchen”. You can insert up to 23 characters and numbers for camera name.
- **Category:**
  This is a function for user to further categorize the camera. Simply click the drop down menu and select which category the camera will be used in. Else you can leave it blank.

Info Server:

The Info-Server is a computer that manages the information of multiple cameras. It provides the communication and link between the users and the cameras. To register to 3JTech’s free server service, simply choose one of the servers on the list. Once registered,

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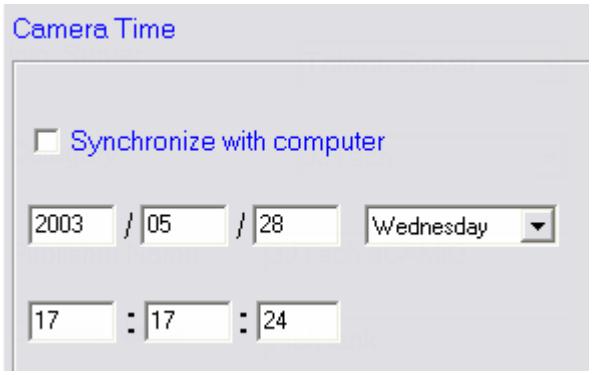
you'll be able to *search* for your camera via the *eCAMit_AP* program or Internet Explorer browser. This function is particularly handy for user who's abroad and do not remember their camera's IP address and Port number. For more information on search function please refer to the *5.2.5 search* section.

For users who wish not to use 3J Tech's server, you can insert your own server's IP address via the eCAMit_AP.

Camera Time

Every eCAMit III camera has built-in real time. With this new function, you will be able to know the exact time at camera site, instead of calculating the time difference while you're abroad. Together with this real-time click, you will be able to let the camera itself turn into guarding mode at specific time and alert the user of unusual situations.



Please enter the time you wish to set for your camera. You can also synchronize the time with you computer. Please check Current Computer Time, and when you update the camera the time on your camera will be synchronized with your computer.

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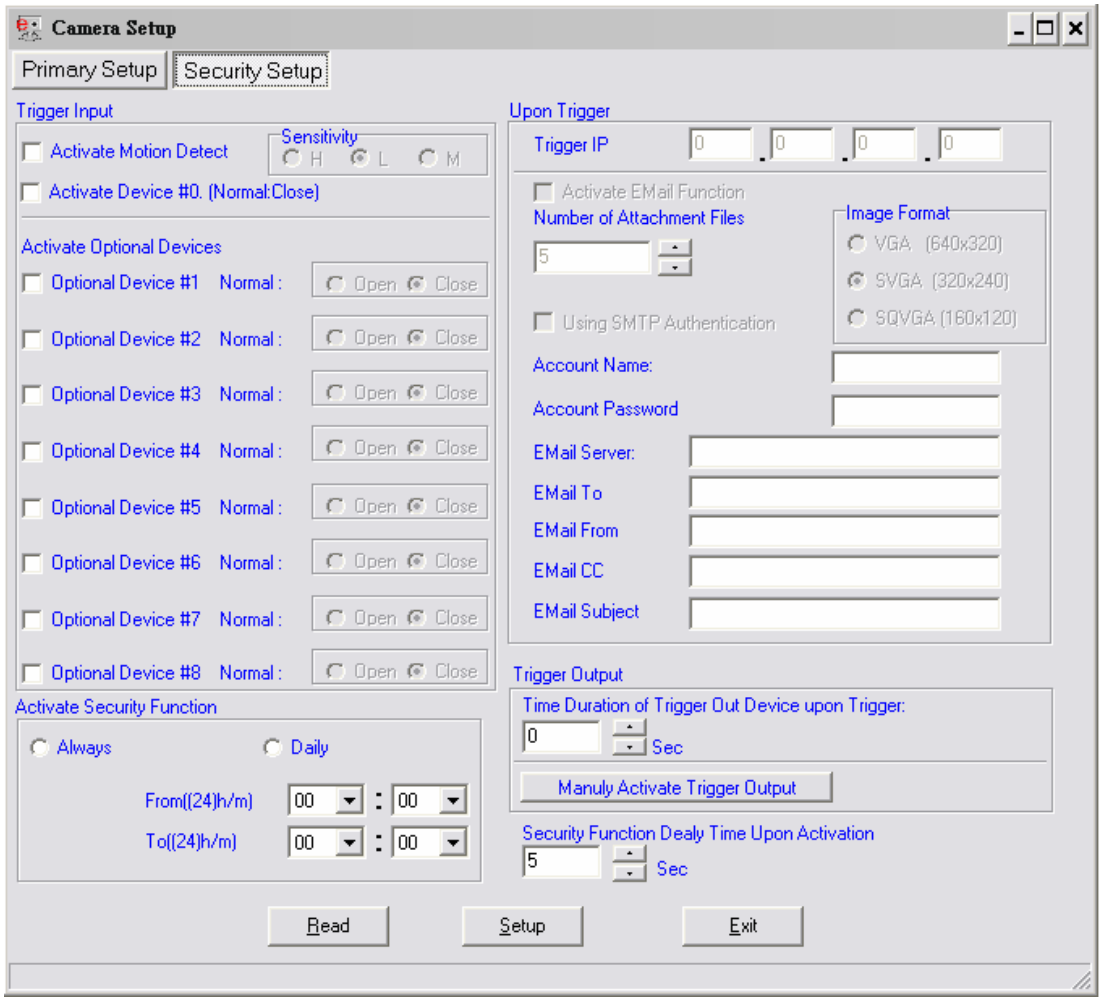
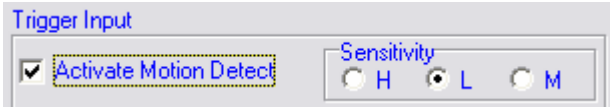
5.2.8.2 Security Setup

To enter the Security Setup, please click on the Security Setup Button on the top of the window. This section contains all the security related setup for you eCAMit III camera.



Motion Detection



Motion detection is one of the built-in functions of your eCAMit camera. The camera is able to detect moving objects and alert remote computer, e-mail or other external devices. This section will show you how to enable and setup motion detection.

To enable Motion Detection (MD) simply click on the checkbox before Motion Detection and you have enabled the function.

- **MD (Motion Detection) Sensitivity:**
  Upon enabling the MD, you can now set the sensitivity of your camera motion detection. You can choose between 3 different sensitivities, Low, Med., and High.

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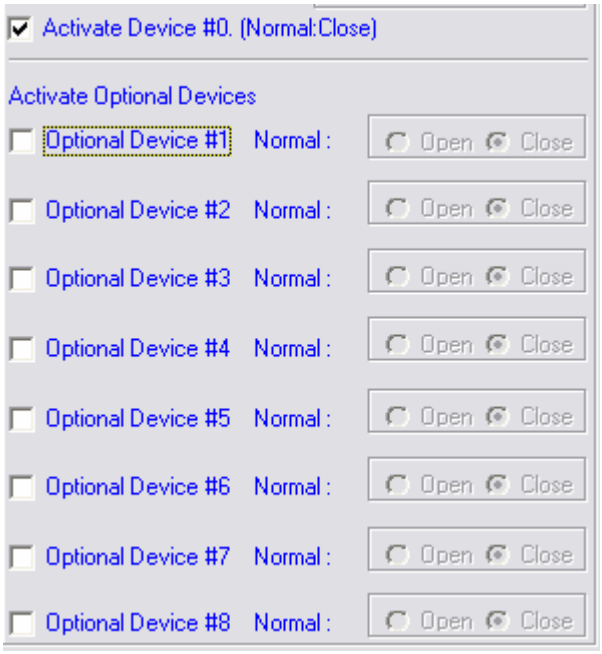
Simply click the option before each sensitivity level to set the MD sensitivity level of your camera.

Trigger In


Activate Device #0. (Normal:Close)
Activate Optional Devices
Optional Device #1 Normal : Open Close
Optional Device #2 Normal : Open Close
Optional Device #3 Normal : Open Close
Optional Device #4 Normal : Open Close
Optional Device #5 Normal : Open Close
Optional Device #6 Normal : Open Close
Optional Device #7 Normal : Open Close
Optional Device #8 Normal : Open Close

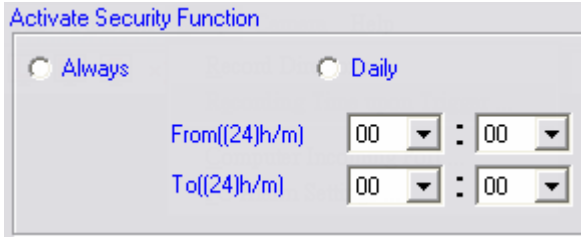
To enable trigger in function, simply click on the check box next to Trigger In. Providing the external Trigger In / Out connector on the power cord is connected to the external device, Trigger in function will enable the user to connect external detection device onto our camera. For example, smoke detector or Infra-red sensor for night vision. When camera is triggered by external devices, it will alert the *remote PC* or *e-mail* to an mail account pre-set and alert the user that it has been activated.

Device #0 are the standard trigger in for eCAMit III camera, on the other hand device #1~8 are optional device to be purchased for upgrading your eCAMit III camera.

Note. If the Trigger In / Out is not connected and the *Trigger In* function is enabled. The camera will act as if it has been triggered due to the internal hardware open wiring of the camera.

The Following Options are only available when Motion Detection or Trigger In are enabled

Activate Security Function:



You will be able to choose between 2 different type of activate your camera security function; Always, and Daily. If always is chosen, the camera will turn into security mode at all time when you have enabled Trigger In or Motion Detection function. On the other hand, if Daily is chosen, the camera will only activate the security mode at given time. The time is based on the internal camera clock.

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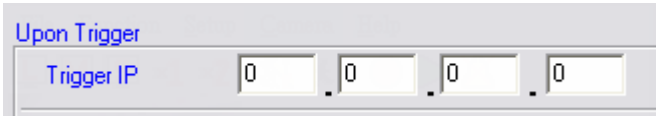
Trigger IP

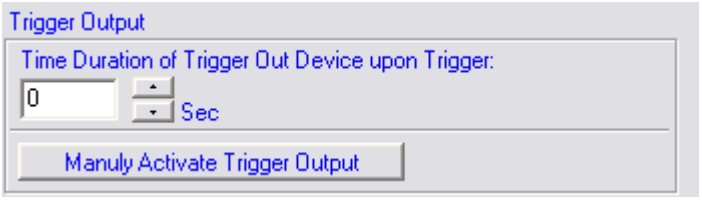


This IP address is used when you have enabled the Motion Detection or Trigger In Function. Simply insert the computer IP which the camera will alert when it has been triggered. If the Motion Detection or Trigger In is not enabled, Trigger IP will not have any effect. For more information regarding to Motion Detection or Trigger In function please refer to *5.1.2.8 Motion Detection* and *5.1.2.9 Trigger In* section.

Note. In order to alert the computer, the corresponding computer must be running the eCAMit_AP.

Note. Trigger IP function will be disabled if the *E-Mail Function* is enabled.

Time Duration of Trigger Out Device upon Trigger:



When camera detects moving objects, the camera will trigger out signals via the special power cord (Please refer to *section 2.4 Power Supply Adaptor*) of eCAMit to other external devices such as lights or alarms. Simply type in the duration of the trigger out signal, and the camera will kept trigging the device until the duration is over.

Security Function Delay Time upon Activation

This function is the time delay for your camera to initiate its security device in order for you to have time to exit the security range. Enter the time in seconds that you wish the camera to delay the security.

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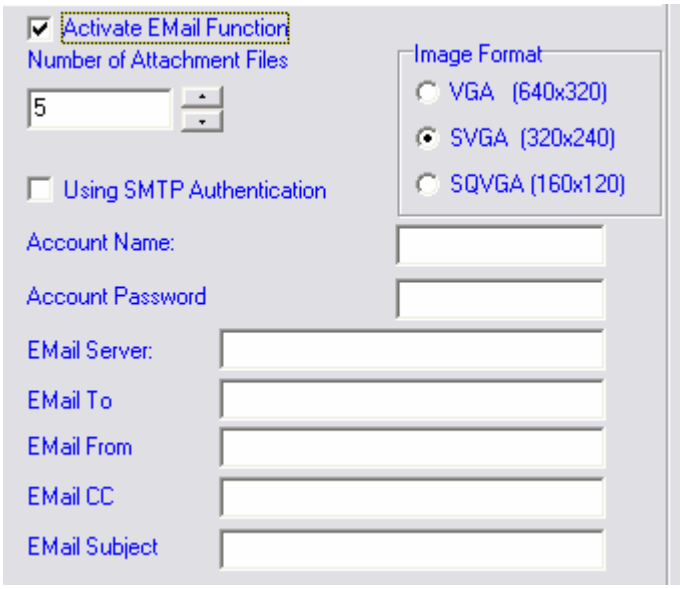
E-Mail Function



To enable E-Mail function, please check the box for "*Enable Mail Function*". The e-mail function for eCAMit camera is to alert the user via e-mail when it has been activated by intrusion. Once the camera is triggered, it will send the maximum number of **20** JPEG files you have set to an pre-set e-mail address. To set up the e-mail function, please follow the instructions below.

- **EMail Server:**
  Here, you have to insert the domain SMTP server of the e-mail ISP you wish the camera to use. You **must** have an SMTP server inserted here else you will not be able to send e-mail. If the mail server domain name is not known, please contact your ISP for details regarding to the domain server.
- **EMail From:**
  This is where you address the ID of the camera which sent the JPEG images. You can insert any valid e-mail address up to 23 characters and numbers. For example, frontdoor@3jtech.com.

> Note. Some SMTP server will check if the e-mail is valid for ISP's system. In that case you must insert a valid e-mail in order to by pass the ISP system.

- **EMail To:**
  This is the destination e-mail address which the camera shall send to. Please insert the e-mail address which will be receiving the JPEG files send by camera. For example. you@3jtech.com.tw.
- **EMail CC:**
  The camera can also send a copy of pictured mail to a different address.
- **EMail Subject:**
  You will be able to set the subject for the e-mail sent. For example, Living Room or Kitchen.
- **Using SMTP Authentication:**
  If your ISP provider requires to log into their system before sending an e-mail. Please check the Using SMTP Authentication, and enter your account name and Password into the space provided.

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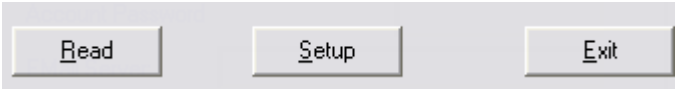
Note. If the E-Mail Function is enabled, the Trigger IP alerting remote computer will be **disabled**. You can **only** chose between *Trigging remote computer* **or** alert by e-mail when the camera is triggered.

5.2.8.3 Setup / Read Camera Configuration

Setup Camera Configuration

Simply click on the **Setup** button once you have finished inserting all attributes to configure your camera.



Note. You **must** update the new attributes to the camera before exit setup program. Else the camera will retain previous configurations.

Read Camera Configuration

Click on the **Read** button to retrieve current camera settings. This will retrieve and display the current information stored in eCAMit camera.

Note. If you click on **Read** button, the unfinished new configuration will be overwritten. It is recommended to **Setup** the new settings before click the **Read** button.

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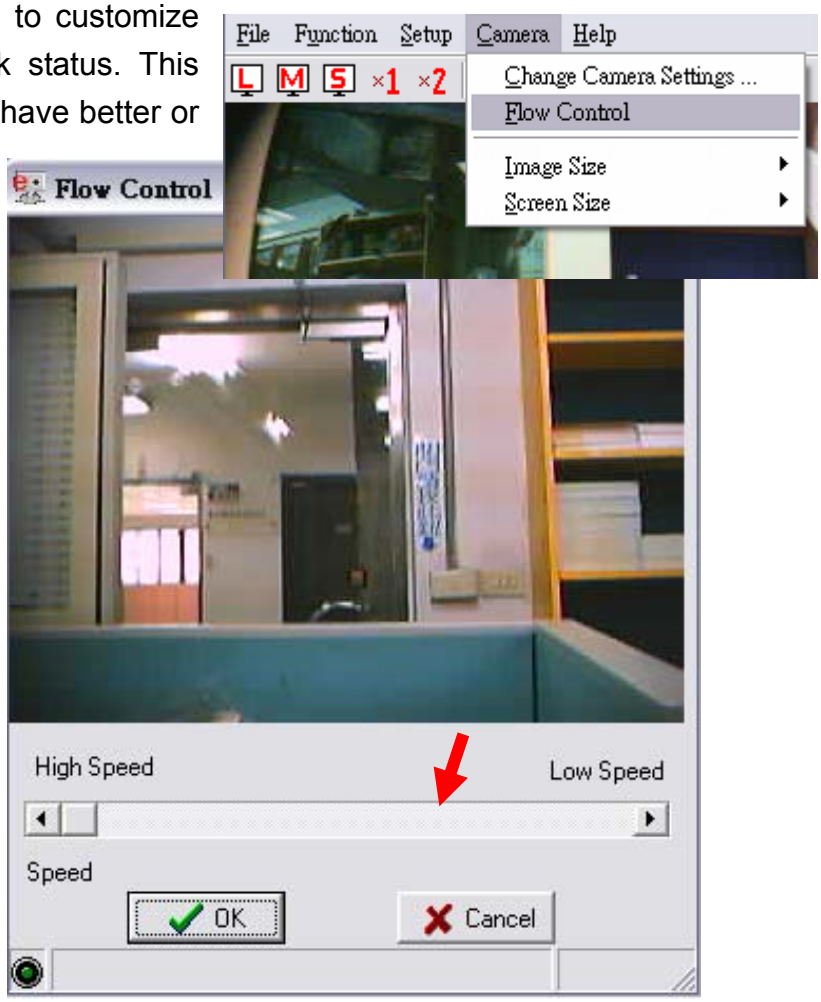
5.2.9 Change Flow Control

Flow Control function is a handy tool to customize the image according to your network status. This function will let you decide whether to have better or faster image to suit your network. Valid connection must exist between the camera and PC to utilize this function.



To start the flow control function, please select from File Menu *Camera → Camera Flow Control*.

After the Flow Control window loaded, you will be able to adjust the image speed through the scroll bar. ***High speed*** would give you faster image, but at the cost of having less clear image. ***Low speed*** on the other hand, would give you greater image quality, but slower in transmission. Simply drag the scroll to set the transmitting speed, and click **OK** when complete.

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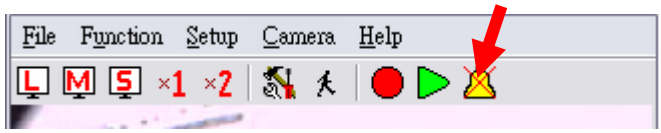
5.2.10 PC Alarm

This is a function where the PC will make alert sound when the camera is triggering it. This is to alert the user that the camera is triggered by anonymous objects and the system is recording the image.

5.2.10.1 Stop PC Alarm

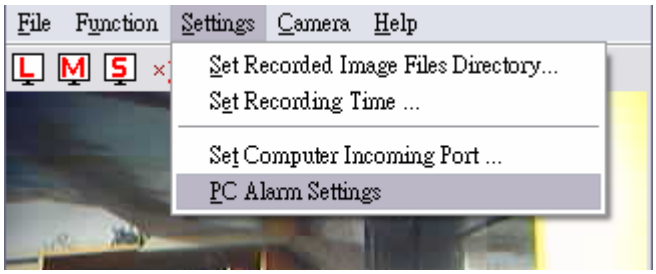
To stop the PC Alarm, simply click the *Close PC Alarm* shortcut button on the top of image screen.



Note. The shortcut button will only temporally turn off the alarm for the current alert, but the alarm will still sounded when next trigger calls.

5.2.10.2 Set PC Alarm

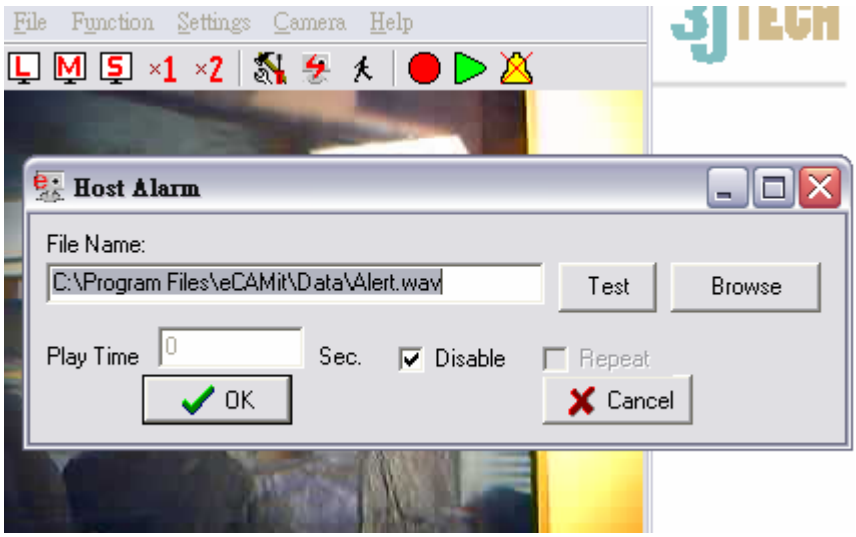
If you wish to change the current PC alarm sound, simply select from File menu *Settings → PC Alarm Settings*.


File Function Settings Camera Help
Set Recorded Image Files Directory...
Set Recording Time ...
Set Computer Incoming Port ...
PC Alarm Settings

Click browse to select a new sound file, Test to hear the sound. Insert the play time in seconds to control the time duration to play the alarm.

If you want to disable the function as a whole, please check the *Disable* box.

Click **OK** when complete.



5.2.11 Automatic Image Recording

Together with camera and the eCAMit_AP, you will be able to set the system to record images automatically when the camera is triggered. To do this, you will need to set the trigger IP with the computer IP that will be doing the recording and activate motion detection or trigger in.

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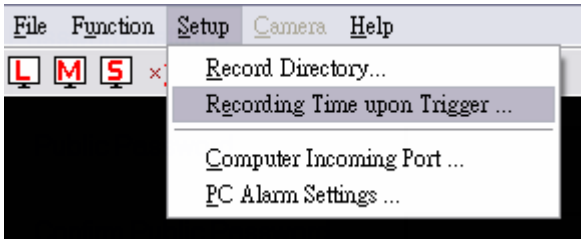
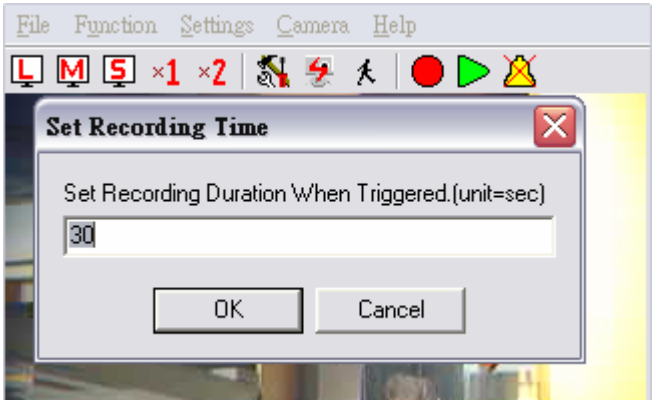
For more information regarding to the camera trigger, please refer to eCAMit_Setup *Trigger In* and *Motion Detection* for direct RS232 connection or *Change Trigger Status* for intranet / LAN connection.

In order for the system to record the image, you **must** have the eCAMit_AP running, and configured the Trigger IP in camera settings to be the IP address of the computer that will be doing the recording. For more information regarding to set up the Trigger IP, please refer to *eCAMit_Setup Trigger IP* for direct RS232 connection or *Change Camera Settings* for intranet / LAN connections.

5.2.11.1 Set Automation Recording Time Duration

The default recording time for automatic recording is 30 second. You will be able to change the recording time by select from File menu *Setting → Recording Time upon Trigger…* and insert the time in seconds then click **OK** to finish.





Note. Unlike eCAMit_AP-Pro version, eCAMit_AP will **only** be able to handle one camera at a time. Therefore, if you have more then 1 camera been triggered, the system will only answer to the first camera the called. Else you will need multiple systems to handle more cameras.

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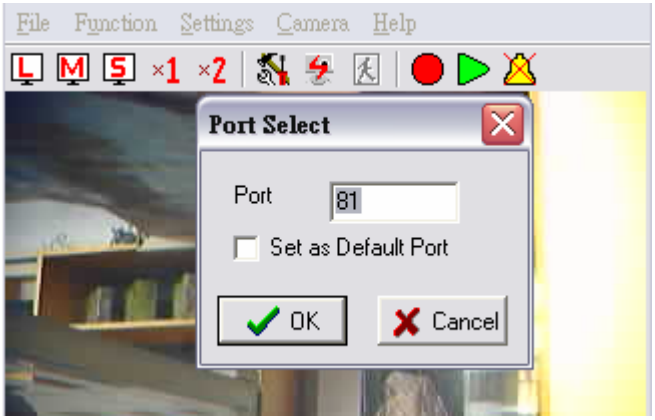
5.2.12 Set Computer Incoming Port

Currently, the eCAMit_AP software will automatically assign a free Port to establish the connection between the computer and the camera. Some system may be installed behind a network firewall protection; therefore not all the ports are available. In case like this, you might be required to manually set the incoming port for your PC system.

To do this, please select from File menu *Setting* → *Set Computer Incoming Port* and insert the port number which will be accepted by your network system.

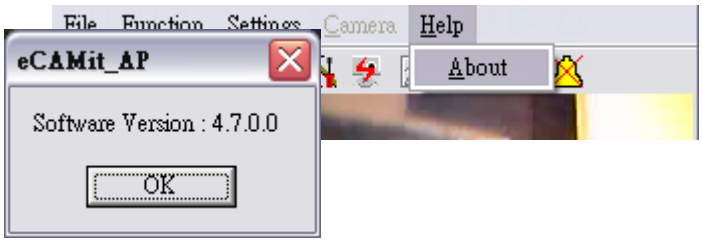


Check the *Set as Default Port No.* box if you wish to make this port the default port for PC end. By doing this, you may not require to change the setting when load the program again.

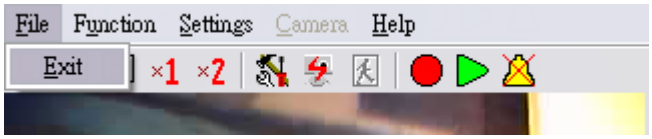
Click **OK** when finish.

5.2.13 Help

Under the File menu *Help* section, you can check for the current eCAMit_AP version.



5.2.14 Exit the Program



Simply select File menu bar *File* → *Exit* to exit the system.

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Appendix A - Trouble Shooting

This appendix provides you useful information to help you to resolve any difficulty you might encounter with eCAMit cameras.

Frequently Asked Questions

When should I use the RS232 Cable?

A: This is direct connection between the computer and the camera and has no intranet / LAN involved. It is highly recommended to use RS232 to configure your camera for the first time.

Can I setup my eCAMit cameras via network for the first time instead of RS232 cable?

A: Yes you can, but you will have to change the domain of your computer to the same domain as the default camera IP (192.168.1.10).
The Default IP settings for eCAMit III is
IP: 192.168.1.10
Gateway: 192.168.1.1
Submask 255.255.255.0
Set your computer to be the same gateway, submask and IP domain: 192.168.1.X where X can be anything between 1~255 except 10.
Please run eCAMit AP, and add the bookmark with IP 192.168.1.10 Port 80. You should be connected to eCAMit III now.
After connect, click on the camera setup and set the correct IP, Gateway, Submask, Server etc. for your eCAMit III.
Please remember to change the IP on your computer to previous condition.

Can I use network (category 5) cable and connect the camera directly to my computer?

*A: Yes, you can use a network **twisted pair** cable and connect the camera directly to the computer. But instead of running the Setup program, you will need to run eCAMit_AP. You will required to change the domain of your computer to the same as the camera.*

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Why can't I find my camera within intranet / LAN?

A: This might be because your camera IP is in different domain with the intranet / LAN. To solve this problem please refer to eCAMit_Setup Camera IP or change the domain on your computer to match the one in the camera.

Can I set up my camera to run as a PC / USB camera on my computer?

A: No, eCAMit camera is a network camera for remote browsing through LAN / Internet.

Do I need to run the eCAMit_Setup every time when I wish to re-configure my camera?

A: No, you can re-configure your eCAMit camera using eCAMit_AP via Internet / LAN once it is installed properly. You only use eCAMit_Setup when you are having direct connection between the camera and PC via RS232 cable.

Why won't my eCAMit camera connect to the Hub?

A: There may be interference in your cable. Try using a shorter cable or one with better quality. Or, the hub you are using may not be compatible with eCAMit.

Do I require eCAMit_Setup or eCAMit_AP in order to configure camera?

A: Yes, you require either eCAMit_Setup or eCAMit_AP in order to configure camera.

Do I need eCAMit_AP in order to browse the camera?

A: No, you can also use Internet Explorer to browse the camera. Please refer to Appendix D – Browsing using IE.

Does the computer at remote site have to be turned on to record image upon trigger?

A: Yes, the computer that will be recording to the image have to be running the eCAMit_AP software and turned on.

What is the size for each frame sent?

A: Each frame size at 320x240 resolutions averages out to be about 6kbytes. Thus, if

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resolution is 640x480, the averages frame size is about 24kB. So, depending on the transmission rate (See Http://www.3jtech.com.tw/CAMit.htm for comparision chart), one can also calculate the file size per time duration.

What is the maximum number of users viewing the camera at the same time?

A: For transmission quality, eCAMit has limited 6 users viewing the camera at the same time. Please note that only 5 users are allowed to login the camera, the 6th user is reserved for trigger out use.

What is the Maximum recording time upon trigger?

A: There is practically no limit to the recording time upon trigger. (Actually 2^{32} seconds).

How do I view the camera site if the camera site is using dynamic IP connection such as PPPoE?

A: To setup eCAMit using dynamic IP connection or having no available IP, you will need a NAT (Network Address Translator) such as router to solve this problem. A NAT box located where your LAN meets the Internet will handle all of the necessary IP address translating problems.
Windows 2000 also provides NAT feature to allow multiple Ethernet cards in your PC. You can use one port for the Internet and the other for your internal network. Please refer to Appendix B – Using Windows 2000 Server /Advanced Server with eCAMit.
If you have bought our router (NAT device), you will find step by step setup in Appendix C - 3JTech NAT / Router Setup for PPPoE and Port Forwarding.

What happens if I can only assign private IP to my camera?

A: If you can only assign a private IP to the camera, you will need a NAT device in order to establish connections between your computer and the camera. ***If you have bought our router (NAT device), you will find step by step setup in Appendix C - 3JTech NAT / Router Setup for PPPoE and Port Forwarding.***

How do I differentiate between private and public IP?

A: The difference between private and public IP is that private IP is the IP used within the Local Area Network, this IP cannot be access directly through internet. Where as public IP will allow access to and from the internet. In general, if your camera is installed within a LAN, then it is using a private IP.

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I could ping the IP of eCAMit, and eCAMit is connected. But the screen is black and the transmission LED is not blinking.

A: This problem is due to parameters are not written properly. Please make a minor change on the camera setup window and rewrite (update) it to the camera again.

How do I setup eCAMit if I have firewalls?

A: Please refer to section 5.2.12 Set Computer Incoming Port for more information.

How can I control multiple sites?

A: Simply open multiple windows of the eCAMit_AP and click on different sites to view multiple sites simultaneously.

3JTechk have also got eCAMit_AP_Pro which will allow you to control, record and browse multiple sites at the same time. Please ask your local service provider for more information.

What should I do if I forget my password?

A: Please connect your camera with a computer using the serial RS232 cable included in the package and run the Setup program to change the password settings.

I have set the e-mail function properly, and the e-mail are correct, why doesn't my e-mail function work?

A: There are few possible causes for not sending e-mail properly. Here are the following, please do check for all possible causes.

1. *e-mail address is not authorized by the mail server – This is caused because certain mail server requires the sender's e-mail's address to be authorized by the server. To solve this problem, please enter a valid e-mail address as sender in order to send the mail.*
2. *SMTP authentication problem – Some mail server requires you to enter user name and password because they let you send the mail. To solve this problem, please enable the Log In function in setup, and enter the correct password and username. For more detail, please see section* ***5.1.3.7 e-mail function.***
3. *Incorrect DNS IP – Because mail server are in domain name system, therefore, you must require a valid DNS server to recognize and direct you to the proper mail server IP. If the DNS inserted are dis-functional or incorrect, you will not be able to link to your mail*

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server. Please enter a valid DNS IP in the camera setup section or, leave it as the default DNS given by the camera (168.95.1.1).

I could not find my camera via search, but I can link to my camera by entering the IP? Why is that?

A: The DNS address is probably not functional. Possibly wrong DNS or the DNS is temporary down. To solve this problem, please change to other valid DNS number. (e.g. HiNet DNS 168.95.1.1)

There is no time stamp on the image send out by e-mail upon triggered. How can I know the time?

A: Every e-mail will have a time stamp recorded when the mail server received the mail. If you're using Outlook or Outlook express, they should display the receiving time for each mail. Whereas for other mail software which does not display the receiving time, you can simply check the content of the mail for the time stamp recorded.

Does eCAMit support DHCP?

A: No, eCAMit does not support DHCP. You need to assign a static IP address, legal or not, to the eCAMit camera.

What is the difference between eCAMit_AP and eCAMit_AP_Pro?

Functions	eCAMit_AP	eCAMit_AP_Pro
Viewing Multiple Site simultaneously	No	Yes
Control Multiple Site simultaneously	No	Yes
Multiple recording simultaneously	No	Yes

For more information regarding to our powerful eCAMit_AP_Pro version, please contact your dealership for details.

How can I view my camera using Internet Explorer?

A: Please see Appendix D for details regarding to viewing with Internet Explorer.

What if I want to install camera at a place where there are no network cable.

A: Please see Appendix E for details regarding to the installation solutions for eCAMit series cameras.

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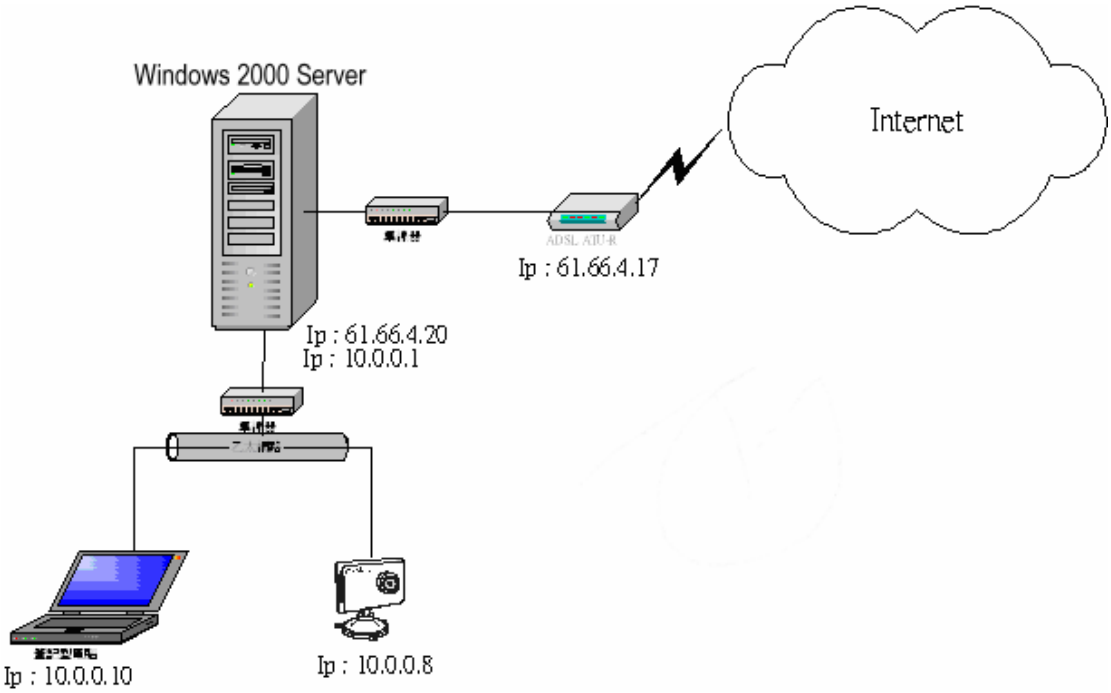
Appendix B – Using Windows 2000 Server/Advanced Server with eCAMit

Environment：



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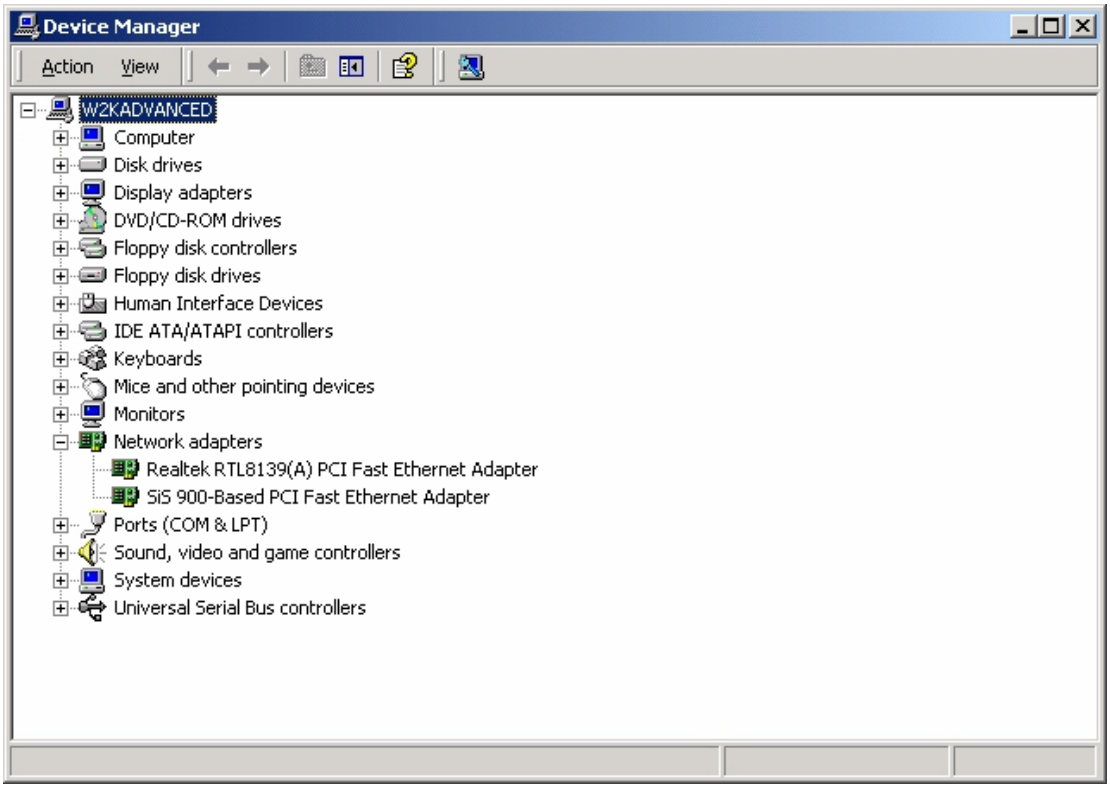
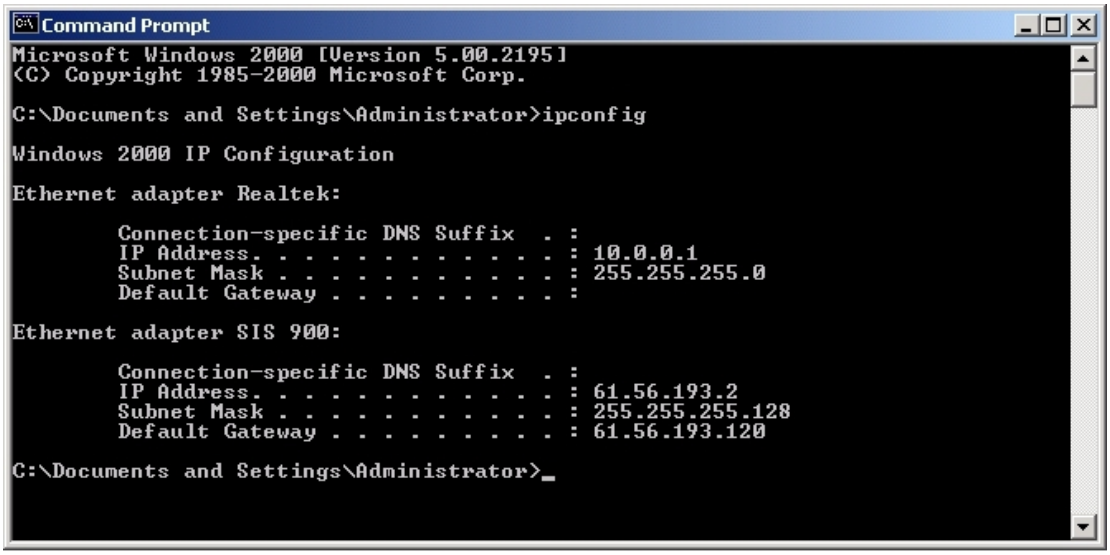
1. Please make sure that there are 2 Network cards installed on the Server computer. One for the internal network while the other for the Internet. As shown in example above, internal network = 10.0.0.1, Internet = 61.66.4.20.




Command Prompt
Microsoft Windows 2000 [Version 5.00.2195]
(C) Copyright 1985-2000 Microsoft Corp.
C:\Documents and Settings\Administrator>ipconfig
Windows 2000 IP Configuration
Ethernet adapter Realtek:
Connection-specific DNS Suffix . :
IP Address. . . . . : 10.0.0.1
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . :
Ethernet adapter SIS 900:
Connection-specific DNS Suffix . :
IP Address. . . . . : 61.56.193.2
Subnet Mask . . . . . : 255.255.255.128
Default Gateway . . . . . : 61.56.193.120
C:\Documents and Settings\Administrator>

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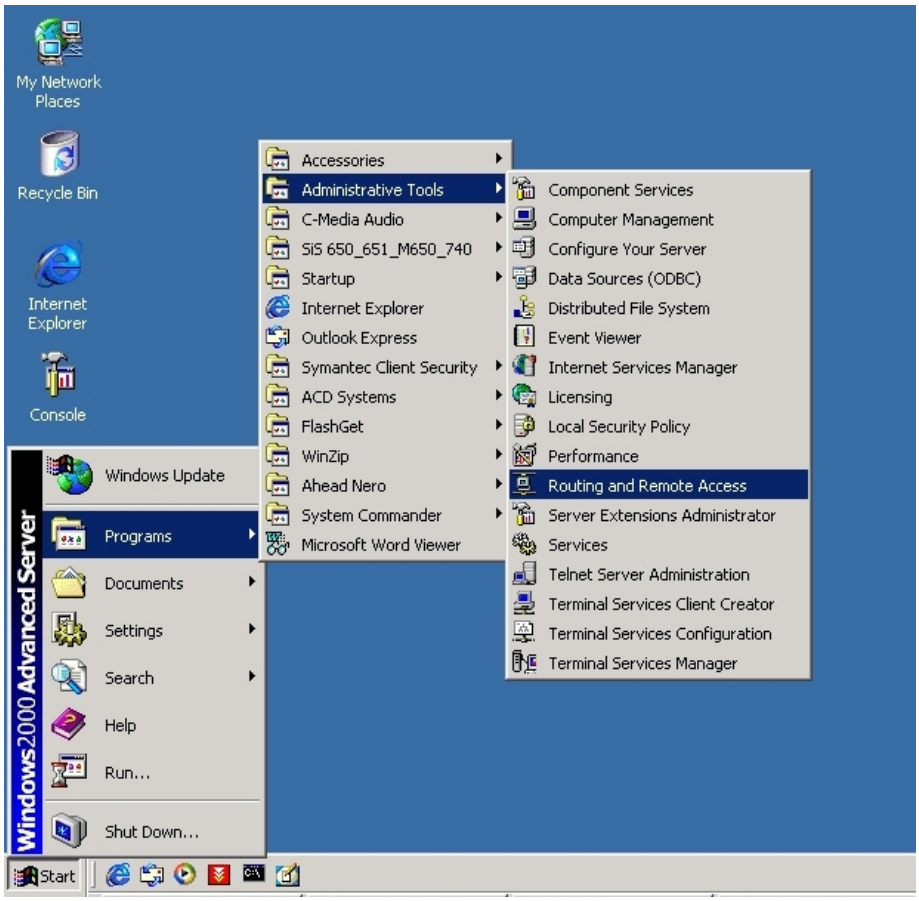
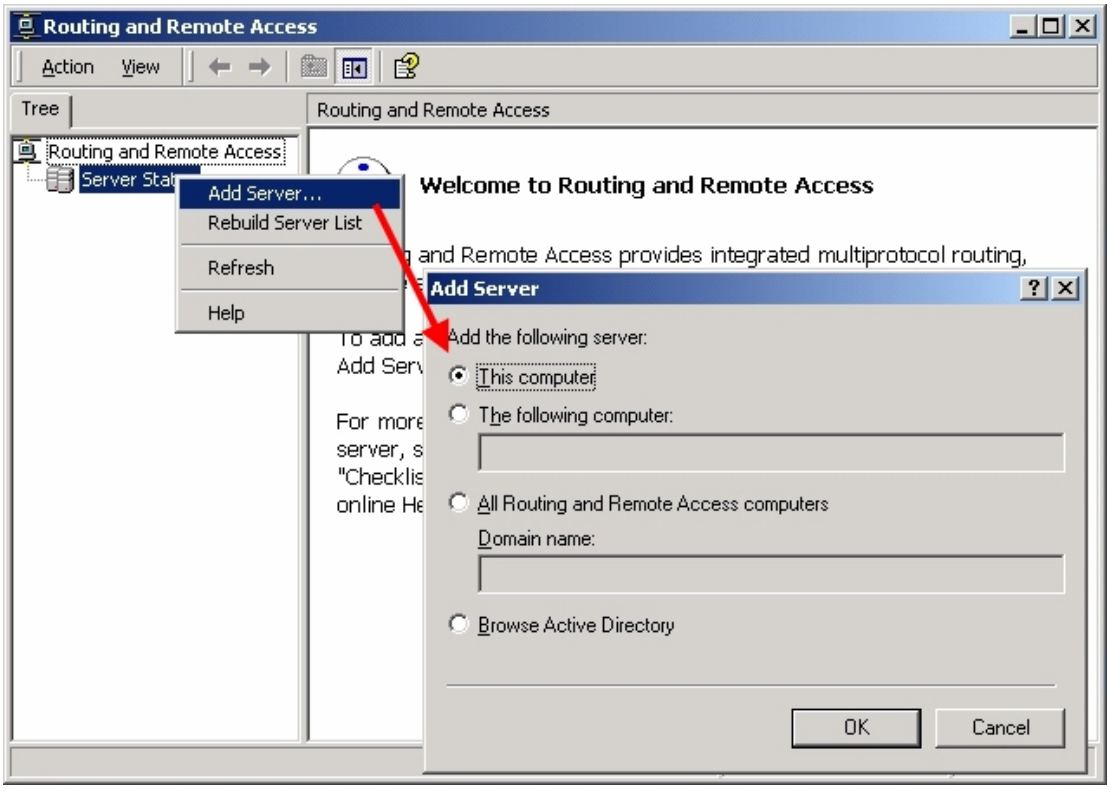
2. Select "**Routing and Remote Access Server**" from the *Start* menu.



3. Right click on "**Server Status**".



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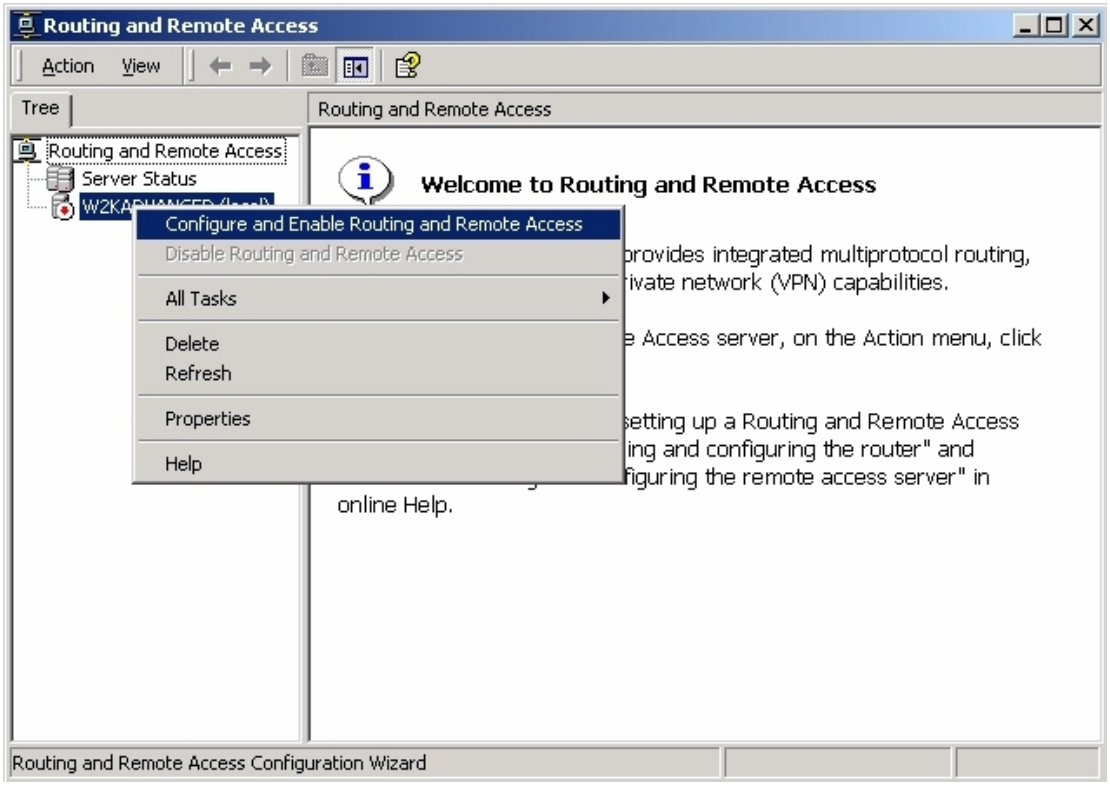
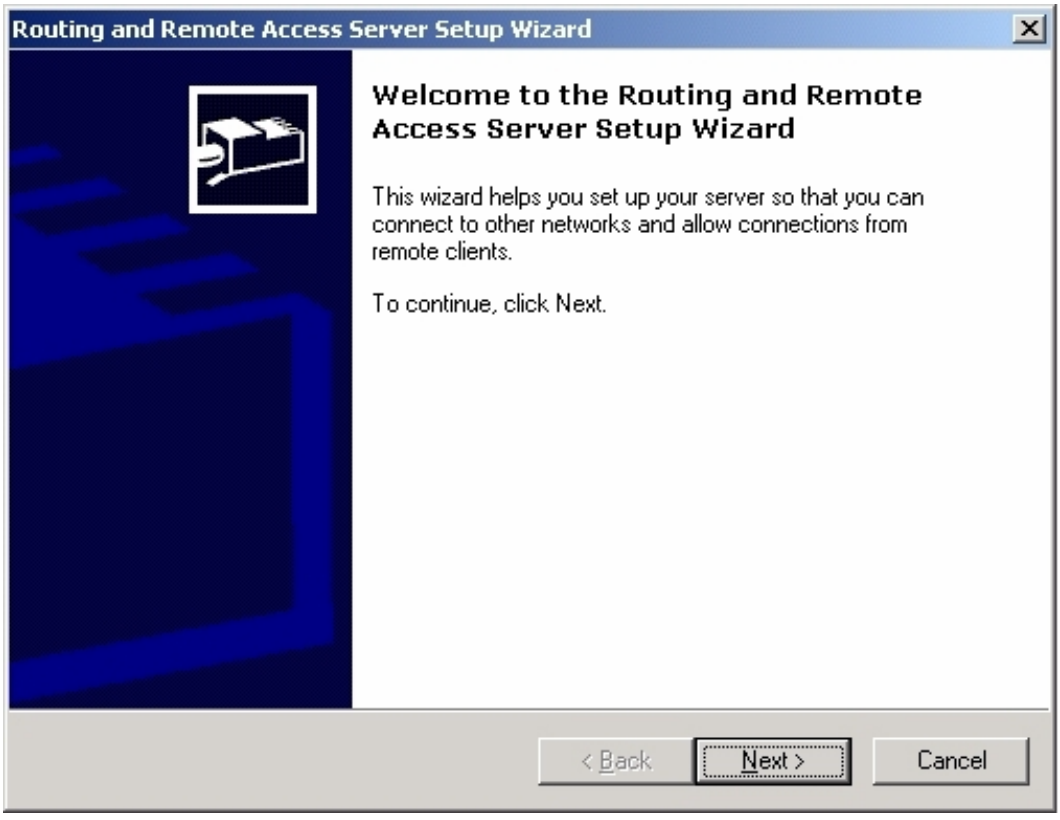
4. **Add new server** → right click on *name* → choose "**Set Routing and Remote Access Server**"



5. "**Next**"


Routing and Remote Access Server Setup Wizard
Welcome to the Routing and Remote Access Server Setup Wizard
This wizard helps you set up your server so that you can connect to other networks and allow connections from remote clients.
To continue, click Next.
< Back
Next >
Cancel

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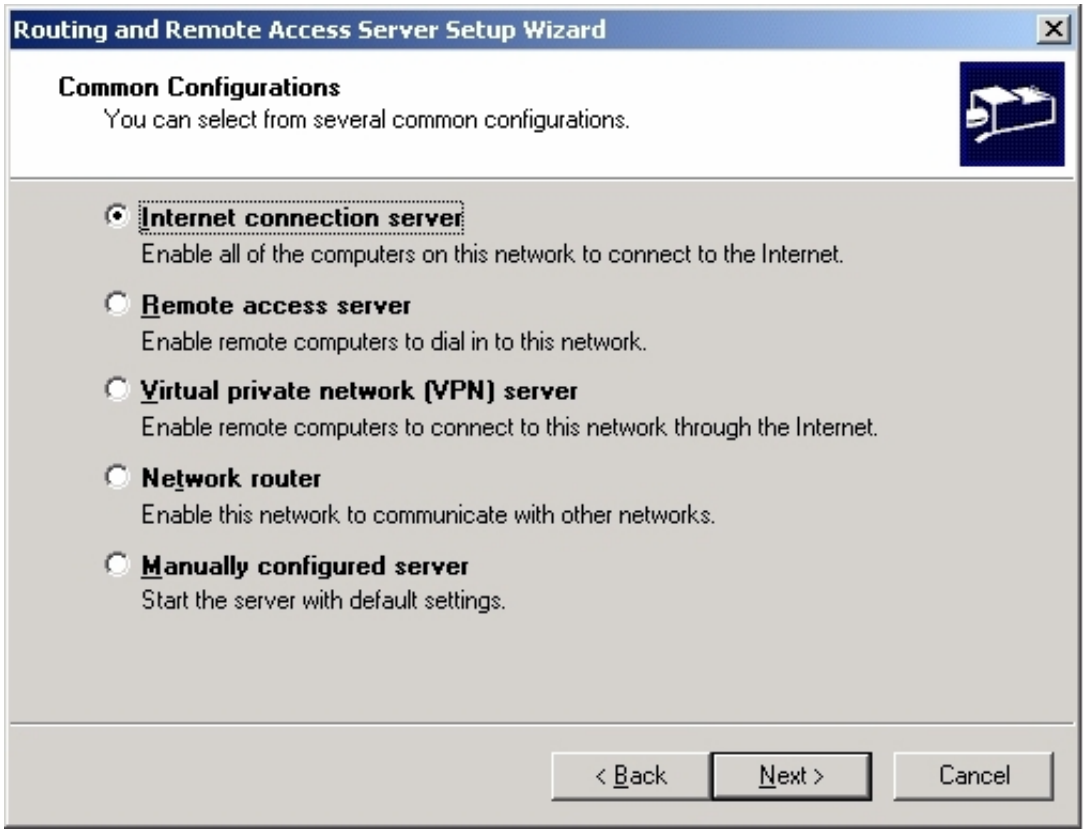
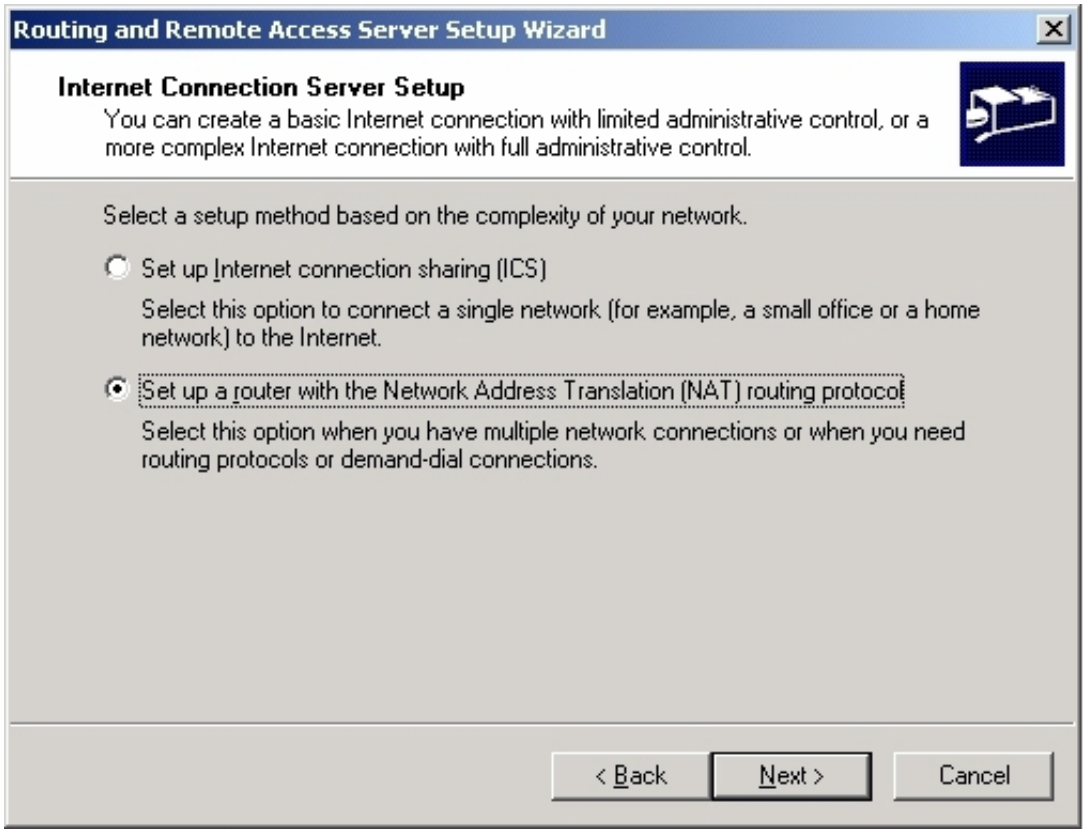
6. “**Connect to Internet server**”


Routing and Remote Access Server Setup Wizard
Common Configurations
You can select from several common configurations.
Internet connection server
Enable all of the computers on this network to connect to the Internet.
Remote access server
Enable remote computers to dial in to this network.
Virtual private network (VPN) server
Enable remote computers to connect to this network through the Internet.
Network router
Enable this network to communicate with other networks.
Manually configured server
Start the server with default settings.
< Back
Next >
Cancel

7. ”**NAT**”


Routing and Remote Access Server Setup Wizard
Internet Connection Server Setup
You can create a basic Internet connection with limited administrative control, or a more complex Internet connection with full administrative control.
Select a setup method based on the complexity of your network.
Set up Internet connection sharing (ICS)
Select this option to connect a single network (for example, a small office or a home network) to the Internet.
Set up a router with the Network Address Translation (NAT) routing protocol
Select this option when you have multiple network connections or when you need routing protocols or demand-dial connections.
< Back
Next >
Cancel

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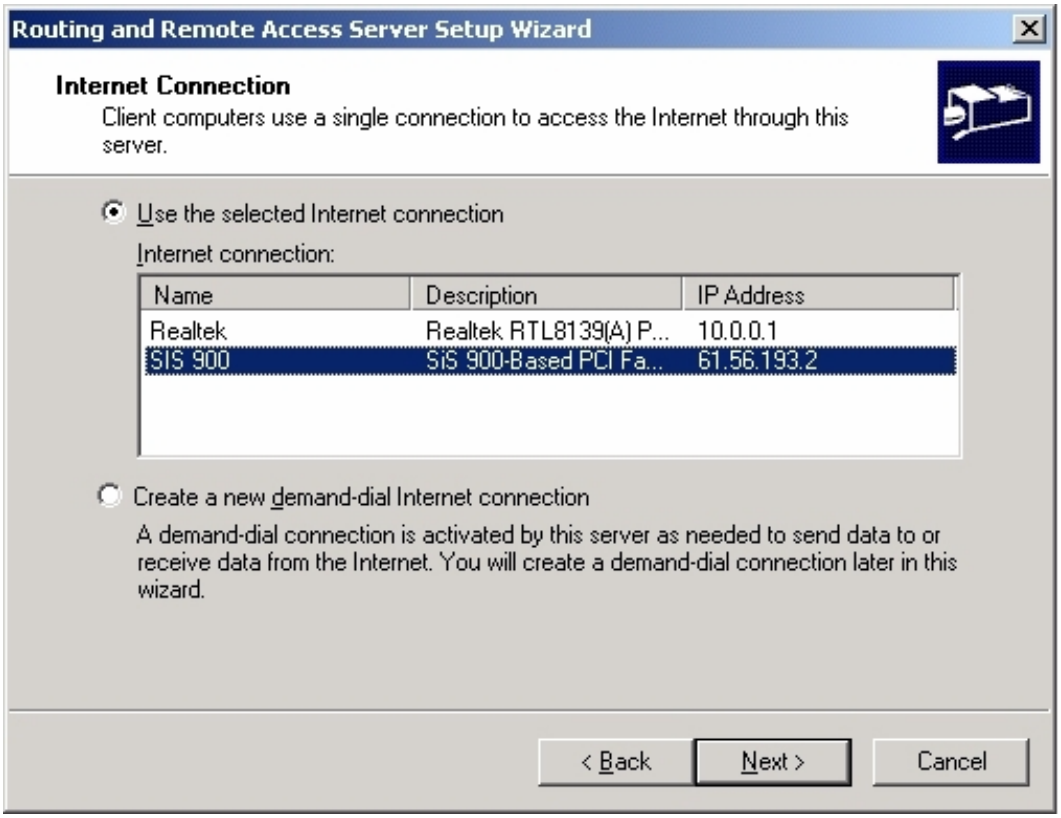
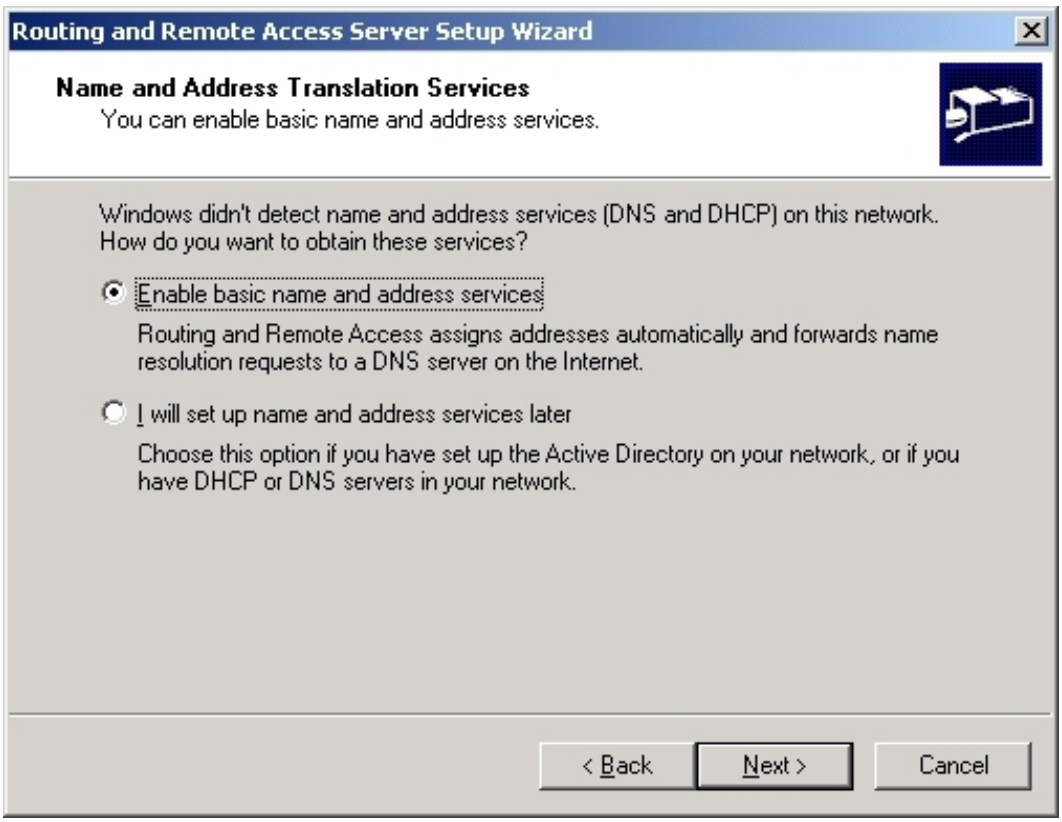
8. Choose the *Internet network card* as set in part 1.


Routing and Remote Access Server Setup Wizard
Internet Connection
Client computers use a single connection to access the Internet through this server.
Use the selected Internet connection
Internet connection:
Name
Description
IP Address
Realtek
Realtek RTL8139(A) P...
10.0.0.1
SIS 900
SiS 900-Based PCI Fa...
61.56.193.2
Create a new demand-dial Internet connection
A demand-dial connection is activated by this server as needed to send data to or receive data from the Internet. You will create a demand-dial connection later in this wizard.
< Back
Next >
Cancel

9. ”**Basic name and IP service**”


Routing and Remote Access Server Setup Wizard
Name and Address Translation Services
You can enable basic name and address services.
Windows didn't detect name and address services (DNS and DHCP) on this network. How do you want to obtain these services?
Enable basic name and address services
Routing and Remote Access assigns addresses automatically and forwards name resolution requests to a DNS server on the Internet.
I will set up name and address services later
Choose this option if you have set up the Active Directory on your network, or if you have DHCP or DNS servers in your network.
< Back
Next >
Cancel

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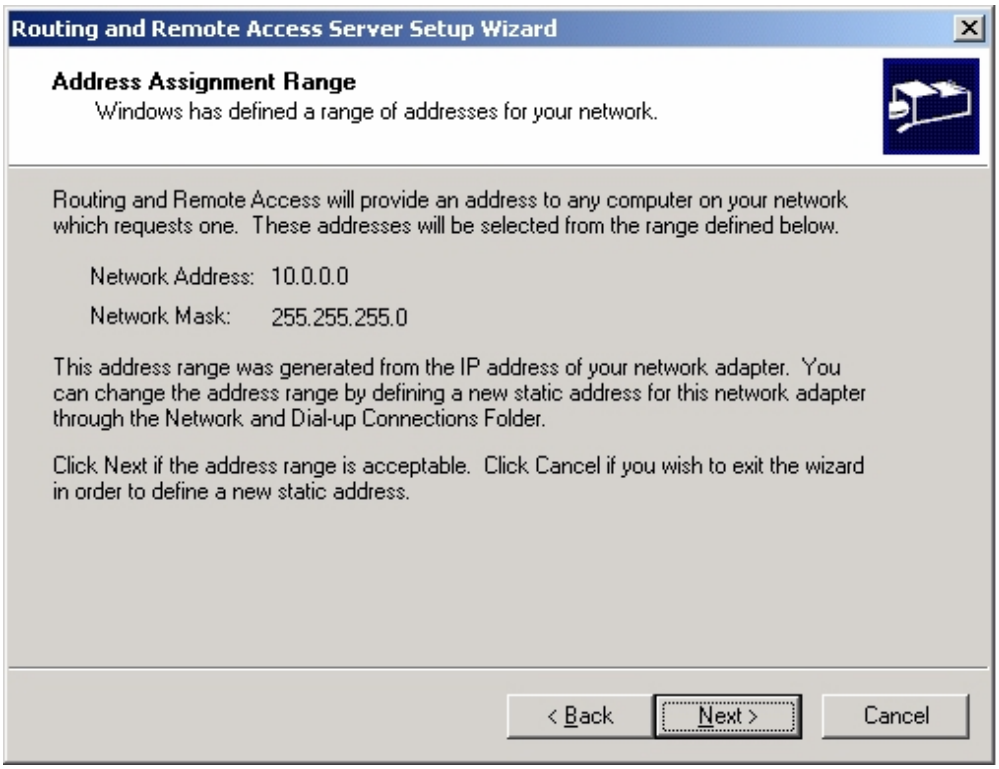
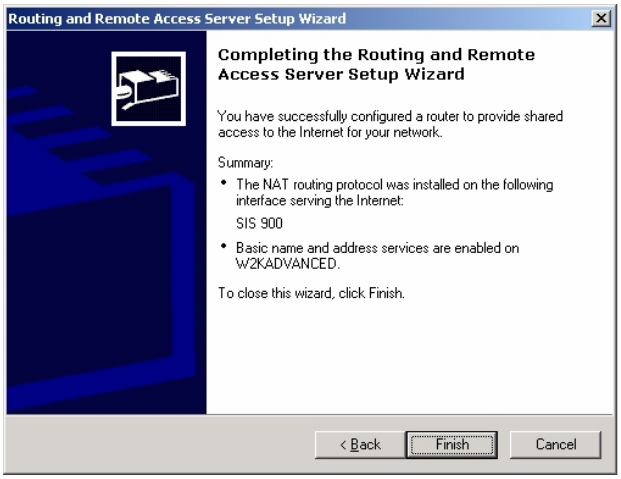
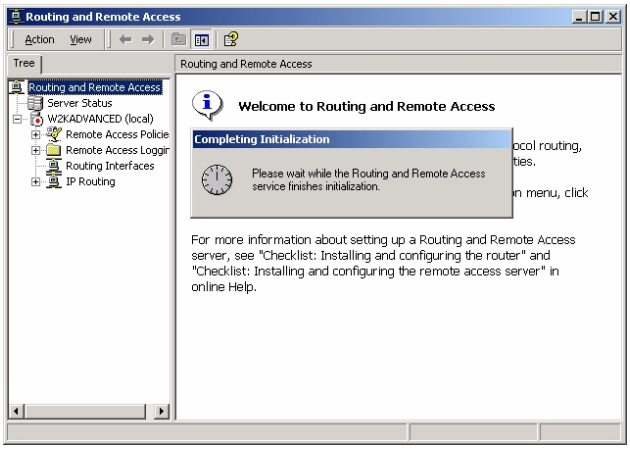
10. "**Next**"


Routing and Remote Access Server Setup Wizard
Address Assignment Range
Windows has defined a range of addresses for your network.
Routing and Remote Access will provide an address to any computer on your network which requests one. These addresses will be selected from the range defined below.
Network Address: 10.0.0.0
Network Mask: 255.255.255.0
This address range was generated from the IP address of your network adapter. You can change the address range by defining a new static address for this network adapter through the Network and Dial-up Connections Folder.
Click Next if the address range is acceptable. Click Cancel if you wish to exit the wizard in order to define a new static address.
< Back
Next >
Cancel

11. "**Finished**"


Routing and Remote Access Server Setup Wizard
Completing the Routing and Remote Access Server Setup Wizard
You have successfully configured a router to provide shared access to the Internet for your network.
Summary:
The NAT routing protocol was installed on the following interface serving the Internet:
SIS 900
Basic name and address services are enabled on W2KADVANCED.
To close this wizard, click Finish.
< Back
Finish
Cancel


Routing and Remote Access
Action View
Tree
Routing and Remote Access
Server Status
W2KADVANCED (local)
Remote Access Policie
Remote Access Loggir
Routing Interfaces
IP Routing
Welcome to Routing and Remote Access
Completing Initialization
Please wait while the Routing and Remote Access service finishes initialization.
For more information about setting up a Routing and Remote Access server, see "Checklist: Installing and configuring the router" and "Checklist: Installing and configuring the remote access server" in online Help.

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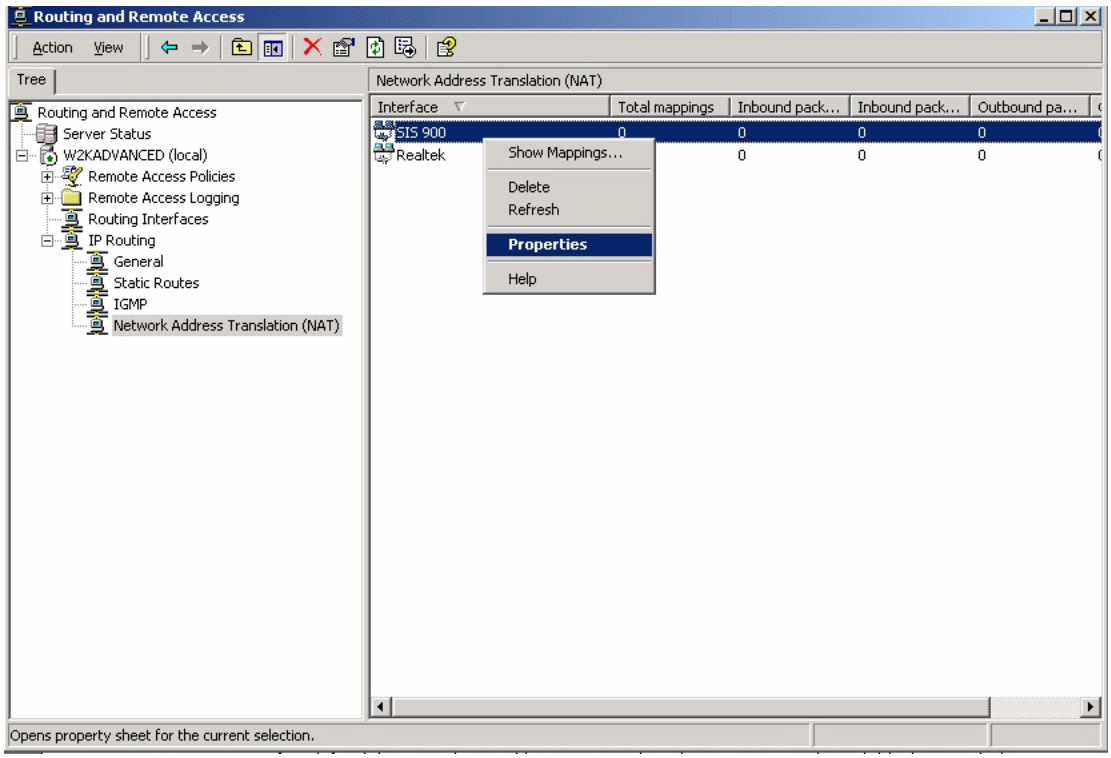
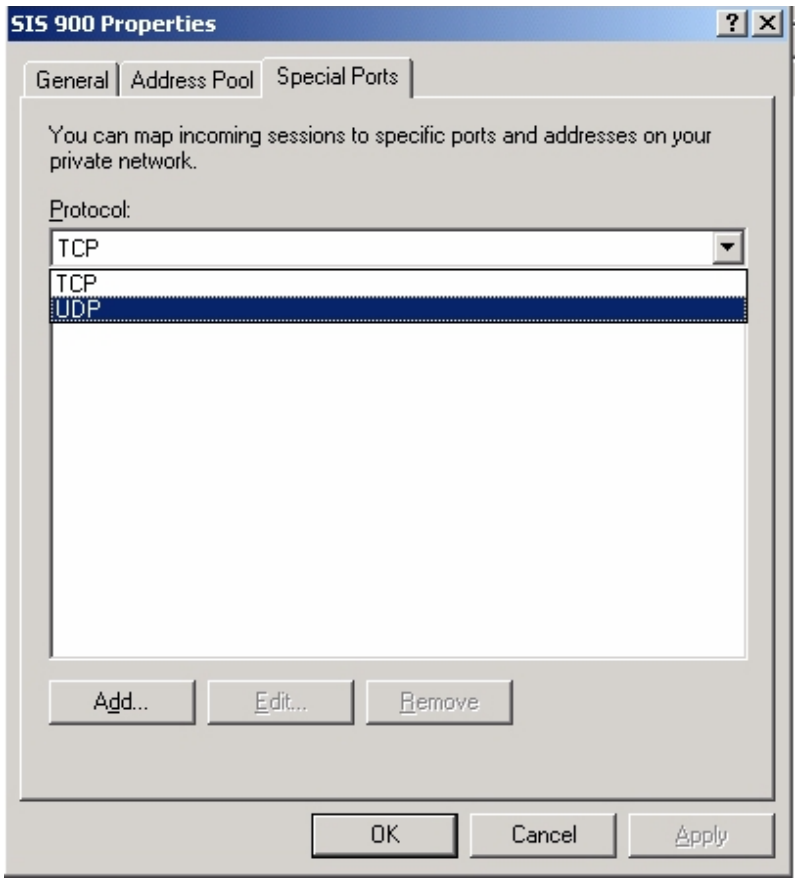
12. Next step is to setup the **Virtual Server** function: please open the **Server IP Router** and right click for **properties**.



13. Select "**Special Port**" and use "**UDP protocols**" and add "**New**".



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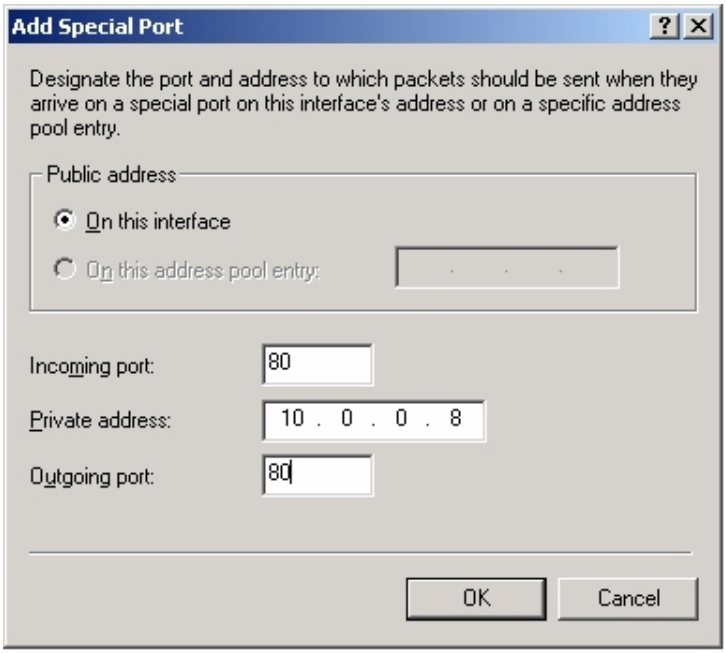
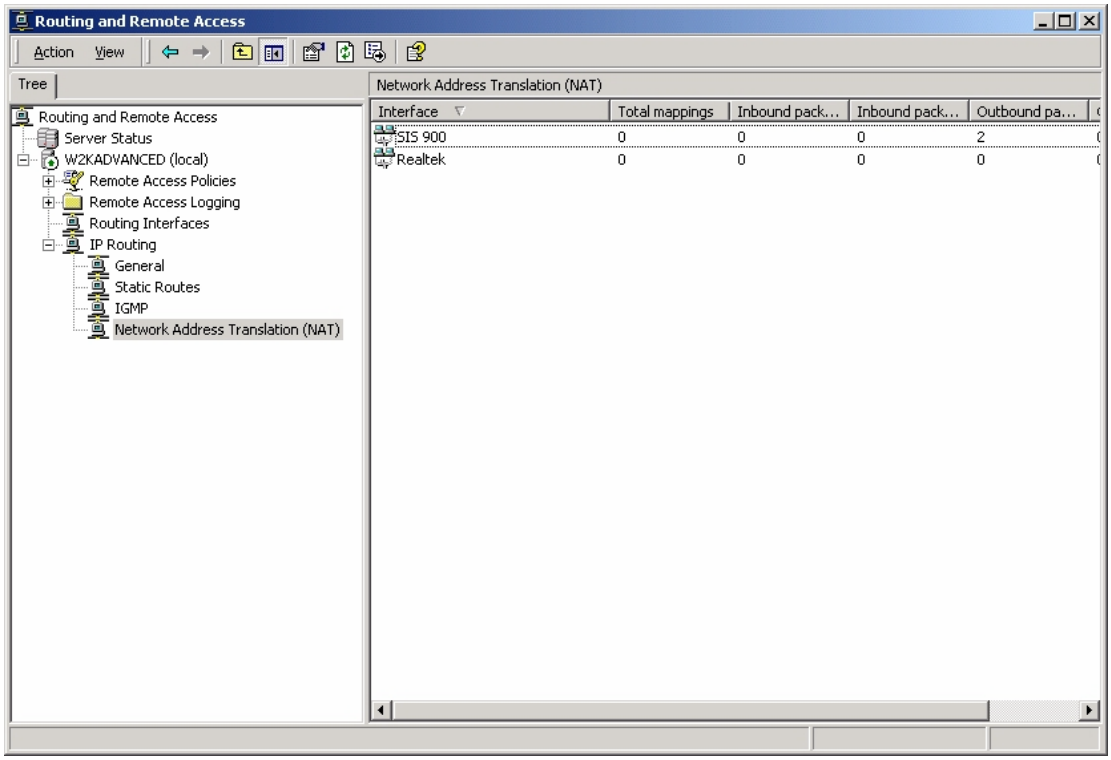
14. Enter the **Port Number** and **IP address** of the eCAMit and click **OK.**


Add Special Port
Designate the port and address to which packets should be sent when they arrive on a special port on this interface's address or on a specific address pool entry.
Public address
On this interface
On this address pool entry:
Incoming port:
80
Private address:
10 . 0 . 0 . 8
Outgoing port:
80
OK
Cancel

15. Return back to the Virtual Server page and you are setup should be complete. Repeat steps 13 and 14 for each eCAMit with different Port Numbers and IP addresses.



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Appendix C – 3JTech NAT / Router Setup for PPPoE and Port Forwarding

This manual is intended for users of 3JTech's eCAMit camera who have dial-up Ethernet connection (PPPoE dynamic IP connection) or users who wish to install the camera within an Intranet or have fixed public IP connection but do not have enough public IP address that could be assigned to the camera.
In the first case where users have dial-up Ethernet connection, users need to use an NAT (Network Address Translator) device and enable the router *PPPoE function* and the *Port Forwarding* function.
In the second case where users have fixed public IP connection, users need to enable the *Port Forwarding* function of the NAT device.
This manual provides users step-by-step instructions on how to set-up the NAT device (router) that is needed to work with 3JTech's eCAMit camera in both cases mentioned above.

How to Set-up the PPPoE Function (Automatic Dial-up to ISP):

To set-up PPPoE for your router, you need to enter the set-up page of your router. To do this, you need to connect the NAT device to the Local Area Network that is connected to your PC and launch your web browser and type the default router IP (192.168.2.1) into the address box and hit enter.

When the password screen loaded, type "*admin*" in the user section and leave the password blank. Click **OK** when finish.

Once you have entered the set-up page, please follow the steps provided below to set-up the PPPoE function:

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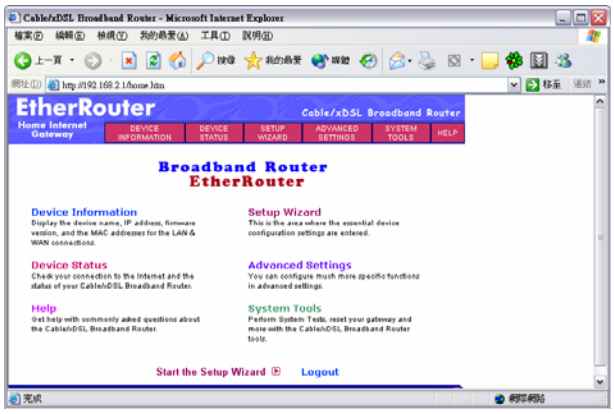
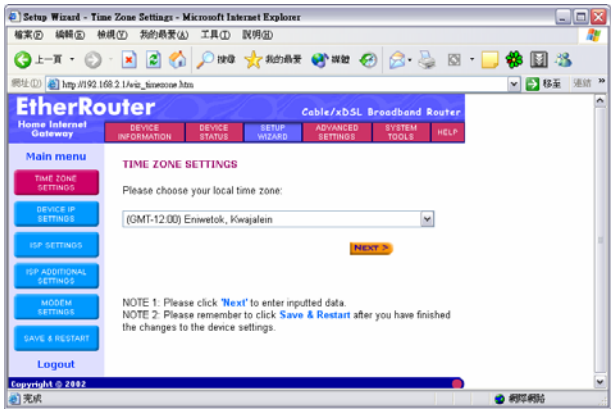
1) Main Menu:



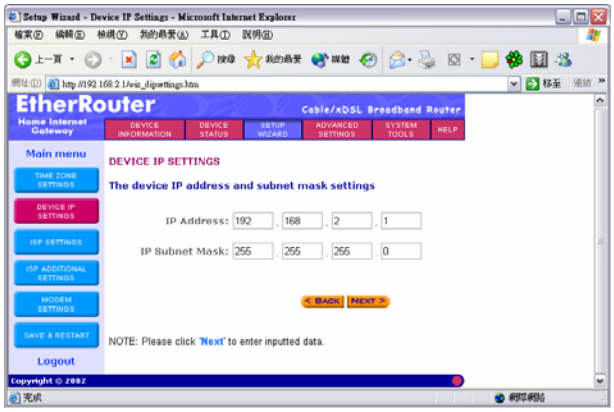
The main menu will appear which displays all the functions for the router. Please select **Set-up Wizard** function in order to configure your PPPoE function.

2) Time Zone Settings:


Setup Wizard - Time Zone Settings - Microsoft Internet Explorer
EtherRouter
Cable/xDSL Broadband Router
Main menu
TIME ZONE SETTINGS
Please choose your local time zone:
(GMT-12:00) Eniwetok, Kwajalein
NEXT >
NOTE 1: Please click 'Next' to enter inputted data.
NOTE 2: Please remember to click Save & Restart after you have finished the changes to the device settings.
Logout

Follow the guiding wizard, the system will firstly ask you to choose your local time zone. Simply choose the time zone you're located on the list and click **Next**.

3) Device IP Settings:


Setup Wizard - Device IP Settings - Microsoft Internet Explorer
EtherRouter
Cable/xDSL Broadband Router
Main menu
DEVICE IP SETTINGS
The device IP address and subnet mask settings
IP Address: 192 . 168 . 2 . 1
IP Subnet Mask: 255 . 255 . 255 . 0
< BACK NEXT >
NOTE: Please click 'Next' to enter inputted data.
Logout

The system will then ask you to set-up the device IP. In this section, you can assign an IP address for your router within your local area network (LAN). This is **not** the IP given by your ISP, but the local internal LAN IP address of your network. It is recommended to leave the IP address with its default value "192.168.2.1."

Device IP address:

This is the internal LAN IP address for your router within your Home Internet Gateway.

Device IP Subnet Mask:

This is the subnet mask, you can usually leave it as the default entry "255.255.255.0."

Click **Next** when done.

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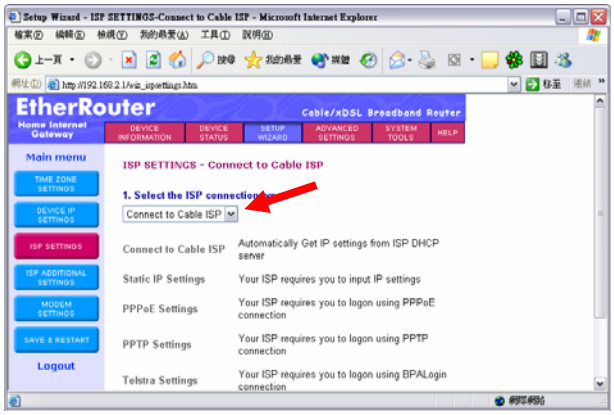
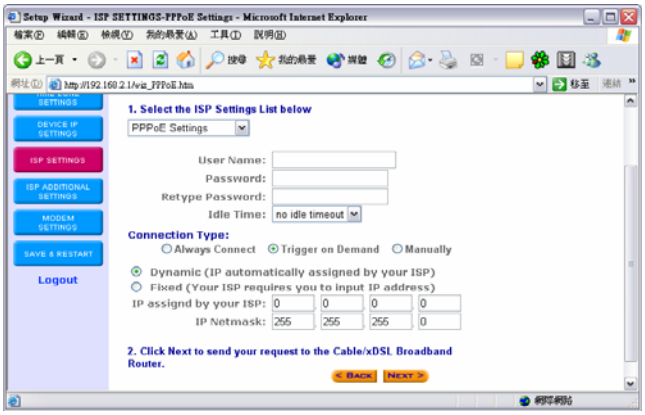
4) ISP Settings:




Setup Wizard - ISP SETTINGS-PPPoE Settings - Microsoft Internet Explorer
1. Select the ISP Settings List below
PPPoE Settings
User Name:
Password:
Retype Password:
Idle Time:
no idle timeout
Connection Type:
Always Connect
Trigger on Demand
Manually
Dynamic (IP automatically assigned by your ISP)
Fixed (Your ISP requires you to input IP address)
IP assigned by your ISP:
IP Netmask:
2. Click Next to send your request to the Cable/xDSL Broadband Router.
< Back
Next >

When the device IP is set, the router will then ask for the ISP settings. Select PPPoE Settings in the pull down list to configure your PPPoE set-up. You will have to enter the following information in order for PPPoE function to work.

User name: Enter the user name given by your ISP account provider.

Password: Enter the password given by your ISP account provider.

Retype password: Enter the password again for confirmation.

Connection-Type: Please select one.

Always Connect – Router will always try to connect to your ISP.

Trigger on Demand – Enable this function will allow the router to detect user accessing the Internet. The router will only connect to you ISP when needed.

Manually – The router will not be connecting to your ISP unless you have asked the router to do so by entering the set-up menu.

Dynamic/Fixed: Please select one.

Dynamic – If your ISP will automatically assign an IP address for you.

Fixed – If your ISP has provided you with a fixed IP address.

In the case of Fixed, please fill in the IP address and the IP Submask that your ISP has provided you.

Click **Next** to go to next page.

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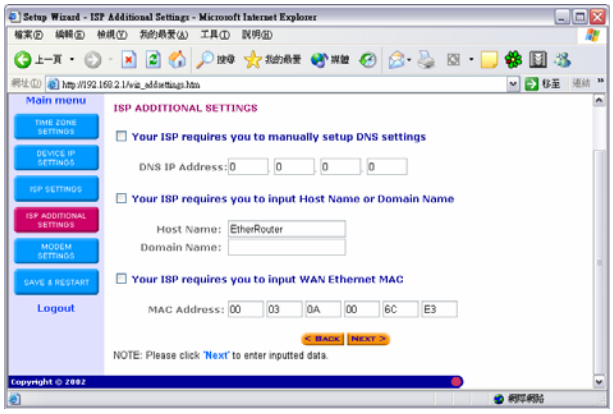
5) ISP Additional Settings:


Setup Wizard - ISP Additional Settings - Microsoft Internet Explorer
Main menu
TIME ZONE SETTINGS
DEVICE IP SETTINGS
ISP SETTINGS
ISP ADDITIONAL SETTINGS
MODEM SETTINGS
SAVE & RESTART
Logout
ISP ADDITIONAL SETTINGS
Your ISP requires you to manually setup DNS settings
DNS IP Address: 0 0 0 0
Your ISP requires you to input Host Name or Domain Name
Host Name: EtherRouter
Domain Name:
Your ISP requires you to input WAN Ethernet MAC
MAC Address: 00 03 0A 00 6C E3
< BACK NEXT >
NOTE: Please click 'Next' to enter inputted data.
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In the ISP additional settings, you can configure special settings required by certain ISPs for authentication purposes. You do not need to configure the entire section, only the settings required by your particular ISP. If your ISP does not require any additional settings, please leave this section blank and proceed on to next section.

DNS settings: Some ISPs requires you to manually set-up the DNS settings; if this is the case, you will need to enable this function and enter the DNS IP Address provided by your ISP.

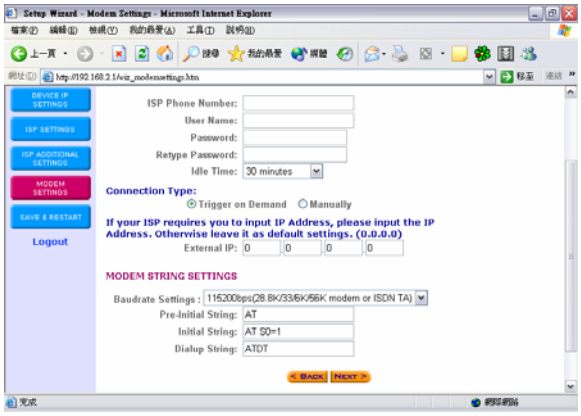
Host Name: Enter the Host name of the gateway.

Domain Name: Enter the domain name provided by your ISP

MAC Address: Some ISPs require you to input the LAN card's Mac address; if this is the case, you will need to enter the PC's LAN card MAC address. To retrieve your MAC address, for WIN 95 / 98 you can run winipcfg, and for WIN 2000 / NT run ipconfig /all to see the LAN card MAC address.

Click **Next** when complete.

6) Modem Settings:


Setup Wizard - Modem Settings - Microsoft Internet Explorer
DEVICE IP SETTINGS
ISP SETTINGS
ISP ADDITIONAL SETTINGS
MODEM SETTINGS
SAVE & RESTART
Logout
ISP Phone Number:
User Name:
Password:
Retype Password:
Idle Time: 30 minutes
Connection Type:
Trigger on Demand Manually
If your ISP requires you to input IP Address, please input the IP Address. Otherwise leave it as default settings. (0.0.0.0)
External IP: 0 0 0 0
MODEM STRING SETTINGS
Baudrate Settings : 115200bps(28.8K/33.6K/56K modem or ISDN TA)
Pre-Initial String: AT
Initial String: AT S0=1
Dialup String: ATDT
< BACK NEXT >

Unless you wish to use a dial-up modem as a backup, otherwise, it is not recommended with our eCAMit serious due to the lack of bandwidth. If you still wish to enable this function, please feel in the blanks accordingly. Your ISP should have provided you with ISP Phone Number, User Name, and Passwords. Fill in accordingly then press **Next**, else if not enabling the function press **Next** without fill in the information.

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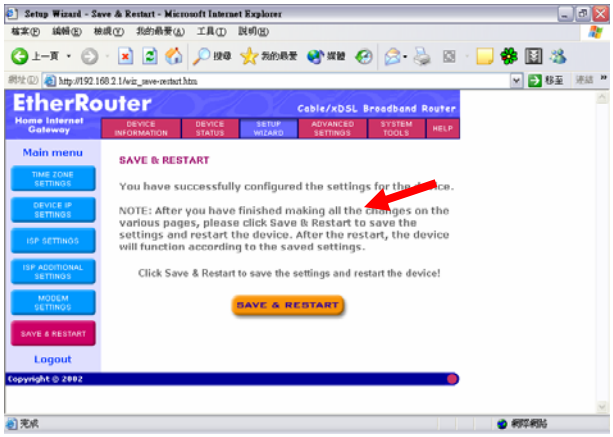
7) Save & Restart:

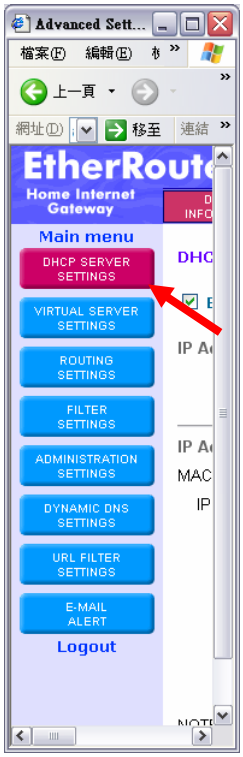

EtherRouter
Cable/xDSL Broadband Router
Main menu
SAVE & RESTART
You have successfully configured the settings for the device.
NOTE: After you have finished making all the changes on the various pages, please click Save & Restart to save the settings and restart the device. After the restart, the device will function according to the saved settings.
Click Save & Restart to save the settings and restart the device!
SAVE & RESTART
Logout

After the required configuration is all set. Click on **Save & Restart** to reboot the router for these configurations to be activated.

During the restart process, the LED of the device will blink. Please **wait** until the LED lights have stopped blinking before proceeding.

How to Set-up the Virtual Server Function (Port Forwarding):

You will need to set-up / enable the Virtual Server (NAT / Port Mapping) function in the router for browsing your camera abroad. The following steps will teach you how to configure the NAT function for your router.



Select “Virtual Server” function shown on the left hand side of the page.

The Virtual Server Settings allows clients on the Internet to access certain services on your LAN via the Internet. With Virtual Server Port Mapping function, you can access your LAN from remotely through Internet.

The **DMZ** function re-directs all packets (regardless of services) going to your WAN IP address to a particular LAN client / server. When the DMZ IP field is “0” the function is disabled. This function should not be enabled when using eCAMit simultaneously.

The difference between the virtual server and the DMZ functions is that the virtual server re-directs a “particular” service / Internet application (e.g. FTP, Websites, eCAMit AP) to a particular LAN client / server (e.g. eCAMit cameras), whereas DMZ redirects all packets to 1 client within LAN.

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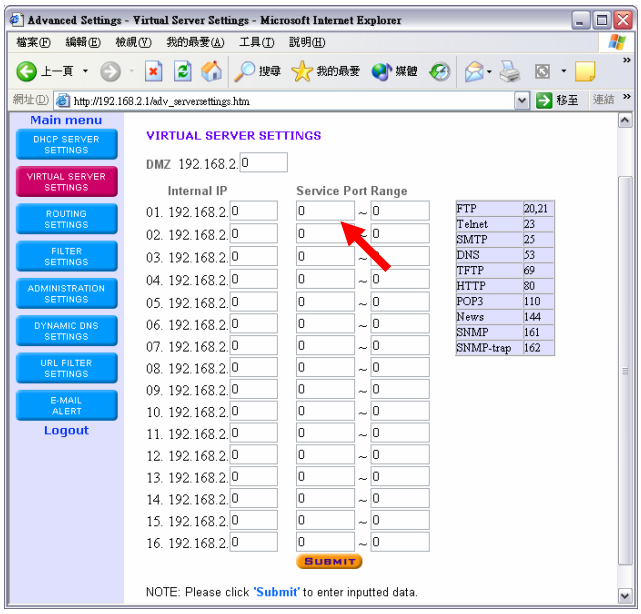

eCAMit requires the Port Mapping system to determine which camera to view. To do this, you will have to know the individual IP and the Port for the camera. (Note: The camera IP should be set as the same domain as LAN, which should be 192.168.2.x). Simply fill the IP of the camera under the *Internal IP* section and the port for camera under the *Service Port Range* accordingly. E.g. If the camera IP is 192.168.2.50, Port 100 you fill in the spaces as follows:

If you have multiple cameras, please fill them in the spaces accordingly.

After each individual camera IP is set, click the "**Submit**" button and the port forwarding set-up should be complete. You should then be able to access your camera remotely via Internet.

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Appendix D - Browsing Using IE.

Now you can use your web browser (Internet Explorer) and view your camera sites! This new function from 3JTech is tailor made for customers who travel on regular bases. With this added feature to eCAMit, one can view a camera site without the need of the eCAMit AP program installed on the computer. In order to browse with IE, ***ActiveX*** functions must be enables on the computer. To ensure ***ActiveX*** is enabled, please follow the steps provided:

1) Open your Internet Explorer,
2) On top of the IE menu bar, select ***Tools,***
3) Select ***Internet Options,***
4) Go to ***Security,***
5) Select ***Custom Levels,***
6) Activate all the ***ActiveX*** controls and click ***OK,***
7) go to the ***eCAMit*** site. (http://ecamit.3jtech.com.tw)
   (Please allow a few seconds for the Applet to download)

Once activated the ActiveX controls and downloaded the applet program, the system is ready to browse the camera sites!

There are two methods to view the camera sites via the Internet Explorer. In order to connect onto the camera site, one can input the I.P. address together with port number or search the camera through the server provided by 3JTech.

For viewing cameras with direct I.P. address, one requires the I.P. address and the port of the camera. To connect onto remote camera sites, simply fill in the I.P. address, port number at the according space and click on the search button provided on the web site.

For our valued customers, 3JTech have provided search functions to make things easier. If one doesn't know the I.P and the port number for the camera, providing the user has registered their camera on our server, one can also search for the camera without remembering the I.P address and the port. To do the search for any registered camera on site, please follow the procedures below:

1. Select the server in which camera is registered with.
2. Select which key words to be search with, whether by camera name, publisher name or category.
3. Type in the camera name or the publisher name preset in the "search item" space

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provided. In the case of categories, selection of categories is required by simply pull down “search item” lists.

4. After all the necessary information is filled in, click search and wait for the results.
5. Click the camera on the result list and view the image!!

3JTech development team hope that with this new feature added to our system, browsing the cameras for our treasured customers can now be even simpler and more convenient.

Thank you for choosing 3JTech products; we hope you enjoy this added value of eCAMit and keep your eyes open for more added functions to our products! If you have any questions, please email us at tech@3jtech.com or tech@3jtech.com.tw.

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Appendix E - eCAMit camera Installation Solutions

eCAMit camera Installation Solutions through Wire, Wireless and HomePlug

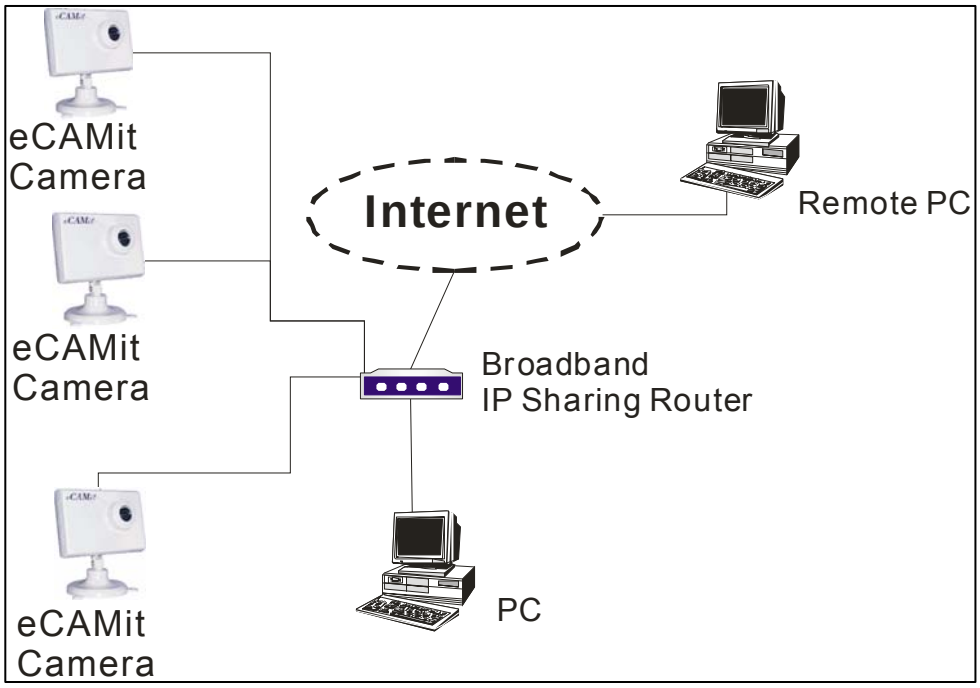
eCAMit cameras are designed for unlimited upgrades, and enhancements. These special features guarantee your eCAMit camera will adapt to your very own environment. 3JTech have provided 3 main types of installation solutions for you to choose from when installing your eCAMit cameras.

These solutions are as follows:

1. **RJ45 Wired Network (LAN) Solution**
2. **802.11b Wireless Network Solution**
3. **Home Plug Solution**

1. The RJ45 Wired Network (LAN) Solution

The RJ45 wired network solution is the most basic installation for your eCAMit cameras. You simply plug the RJ45 to the camera and your hub or router to place your camera onto the network.



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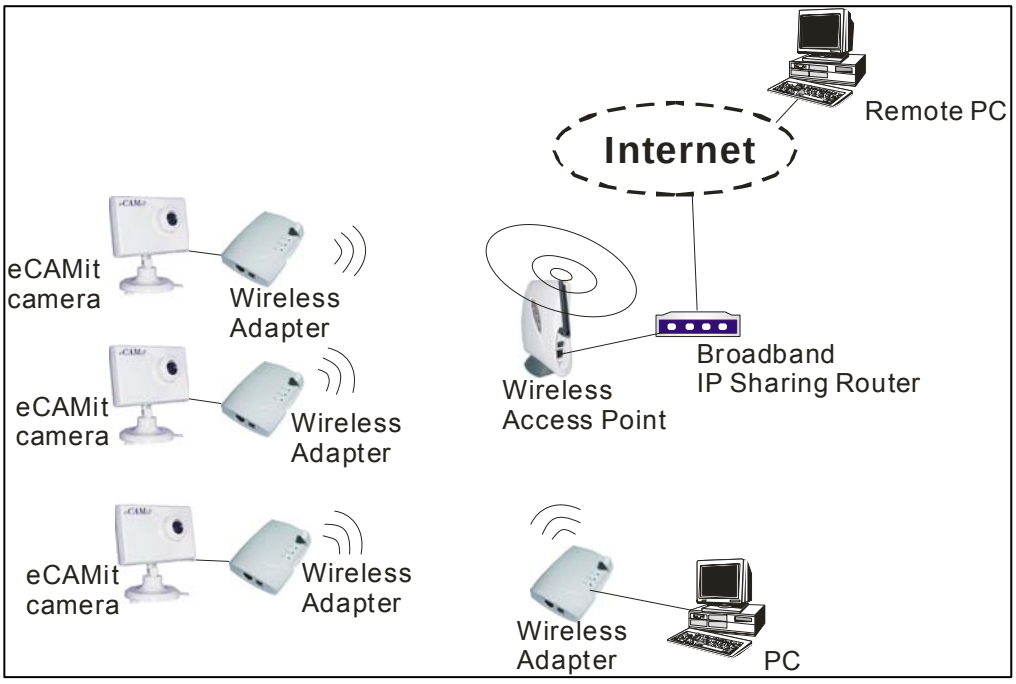
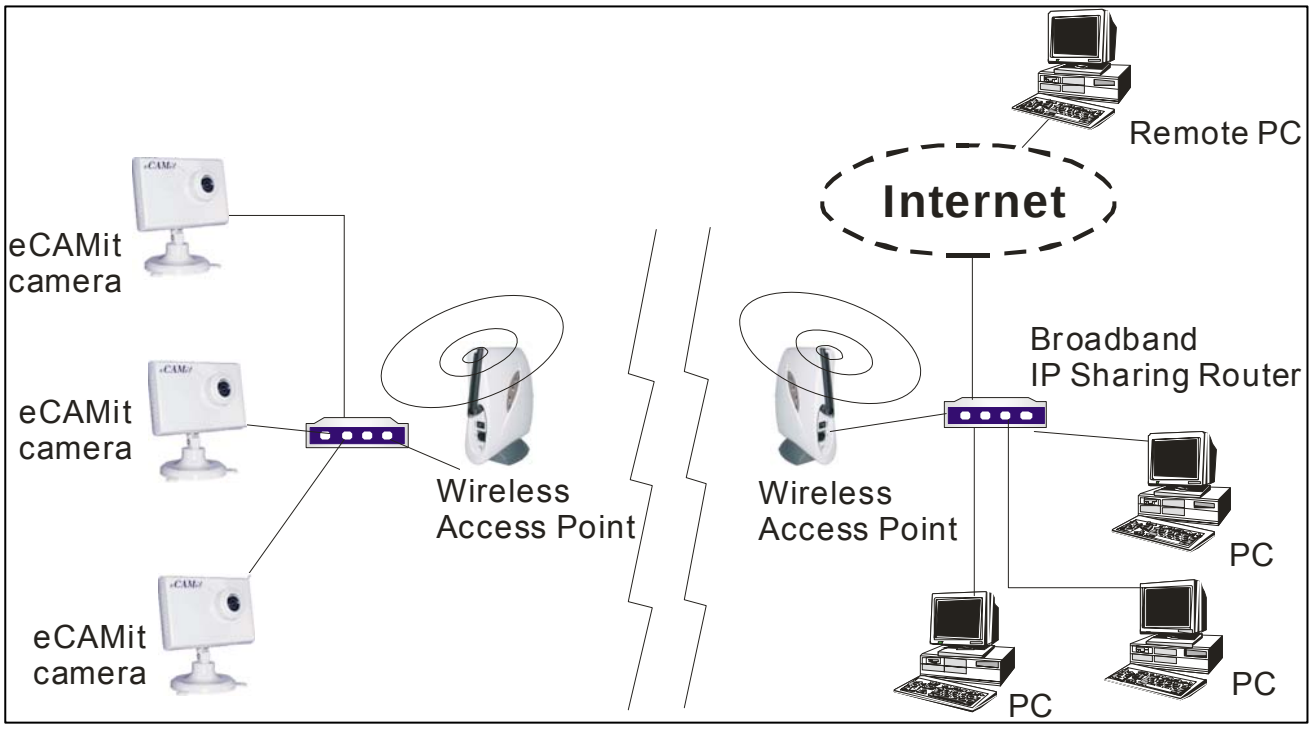
2. 802.11b Wireless Network Solution

3JTech also provides the users with wireless solution for users who have not got the RJ45 cabling and wish not to have the cable ruining the view. With the latest 802.11b wireless LAN technology, to install an eCAMit camera couldn't be simpler. Together with Access Point and Wireless Adapter, you can place your camera anywhere in the house without the troublesome of laying the cable. The standard distance for the Access Point is 50 meters in open environment. Do not worry if the camera is too far away from the Access Point, the Access Point can act as bridge and rely the signals. Simply place an extra Access Point to extend the signal range.





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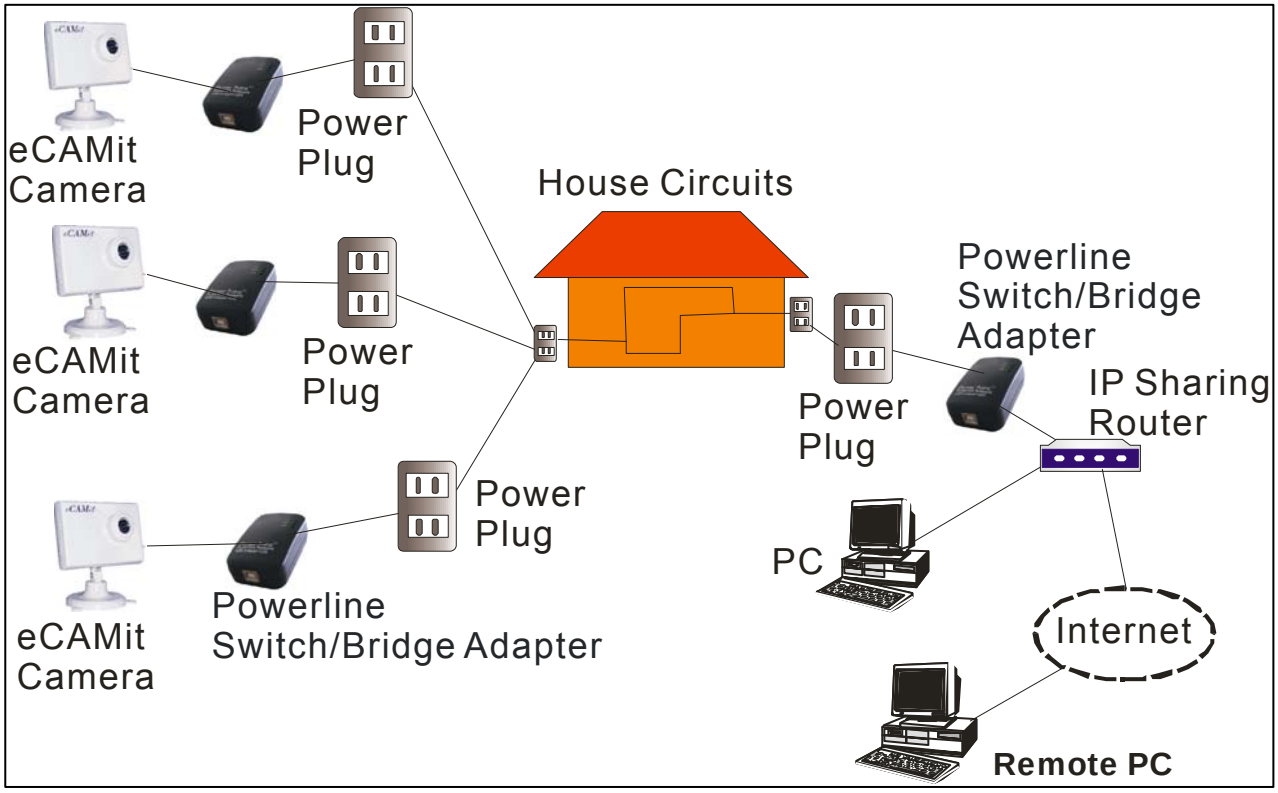
3. Home Plug Solution

If you think 802.11b environment is not necessary, and you do not feel like to lay the cables. 3JTech will provide you with an alternative solution which will transfer the network (LAN) signals over your house power line. The device is called the Powerline Switch/Bridge Adapter (Home Plug). It is easy to install, all you need to do is plug the RJ45 cable to the device for both computer/router and camera end which is plugged into your power point. The powerline system will turn into a 14Mbps LAN system. This way you will save up in setup a wireless environment, and have your cable hide in your wall for no extra effort.



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Appendix F – Specifications

- Power consumption: 5V DC, 300mA
- Interfaces:

  DB9C at 9600 baud rate, 8,n,1 for parameters setup

  RJ45 for Ethernet 10BaseT

  RJ22 connector for 5V DC/90~240V AC adaptor and trigger in/out
- Trigger in: Normal close to open or Low to High TTL level
- Motion detection sensitivity: High, Medium, and Low
- Trigger out: Low to High TTL Level
- Internet Protocol for IP connection: UDP
- UDP Port Used: 80 and any port above 1000 (firewall, if any, has to allow these port to go through)
- Transmission Speed:

  High Resolution (640x480): maximum 6 frames/second

  Medium Resolution (320x240): maximum 10 frames/second

  Low Resolution (160x120): maximum 15 frames/second
- Camera Specification:

  CMOS Camera support Specification:

  101,376pixels, 1/4”lens, CIF format

  352(H) x 288(V)

  eCAMit use Specification:

  300K pixels, 1/3 lens @ at 120 degree angle, others are optional.

  320(H) x 240(V)

  S/N Ratio: > 48dB

  Gamma Correction: 0.45

  Lens (use in CAMit standard sensor):

	Standard lens:	Optional lens:
Min. Illumination:	<5 lux@f2.0	<5 lux@f2.0
Focal Length	3.6mm	2.1mm
Back Focal Length	5.96mm	5.44mm
Aperture F	2	2
Angle of View (DIA)	73	116

- Operation Environment:

  Temperature: 0°C~55°C Humidity: 85% relative at 25°C
- Weight: 150g
- Dimension of Main Body: 10cm x 6.5cm x 5 cm

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